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Studio B/Danny O'Connor

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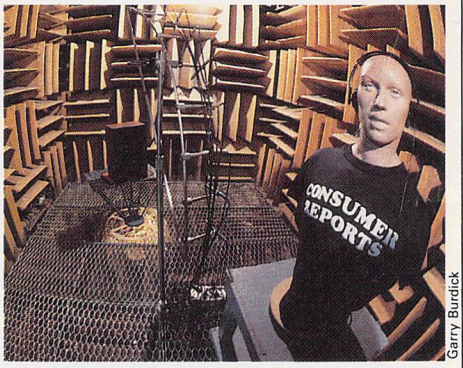

Garry Burdick

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Too Hot to Print

Catch computer industry news as it happens, keep up with online events, read special reports, commentary and more product reviews. You'll find it only in *Online Today Daily Edition*, a daily-updated newspaper full of information that's too hot to print. GO OLT.

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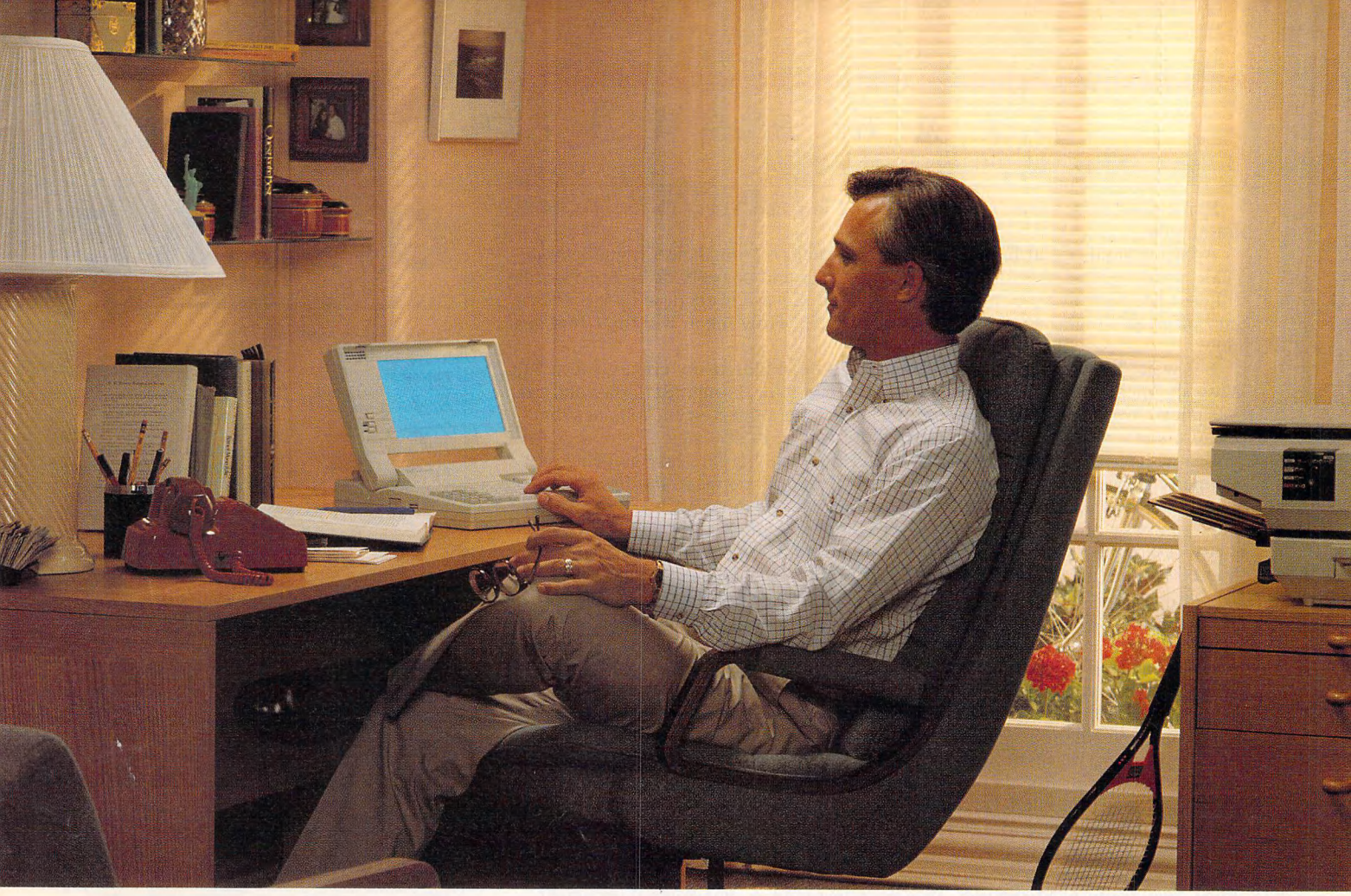

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DEAR READER

Remember those math "story problems" in school? Let's do one just for old times' sake:

A basic round-trip airline ticket to San Francisco from Jane's hometown is $400. Because Jane plans to leave on a weekday and come back before Saturday, it'll cost her $100 more. Jane plans to take the red-eye in the low tourist season, (an "off-peak" flight) so she can subtract $83.55. How much will the ticket cost Jane?

But wait! There's a change in plans. Did Aunt Mildred say come visit in July? Why, she meant May. No sweat. Now Jane can stay through Saturday and get that juicy "over-the-weekend" discount. But Jane's ticket agent tells her that because she's made a change in plans there will be a $150 cancellation penalty. Not to worry—the penalty is mostly offset by some big fare restructuring that dropped the base price of a ticket by $118.80 since Jane made the first reservation. If she waits another week, the base fare may drop another $50 or so, but there's no way of knowing for sure—or is there? And what's this? Her reservation is now less than 30 days in advance, so add $114.35. And, oh, by the way, May is "peak season," so add another $98.75 and multiply by Jane's blood pressure. Now how much will the ticket cost? How much would it have cost to go to Cleveland instead? Will Jane lose her mind? Could Jane have avoided these story problems?

If Jane owned a computer, she could have helped herself and made the story problem a lot less onerous for those hapless students with math anxiety. By accessing online travel services, consumers can directly tap airline, hotel and car reservation information systems. The value of these services is especially great for people who have reasonably flexible schedules and a little time to comb the databases for a bargain. It's simply not cost-effective for a travel agent to provide the same level of service that you can provide for yourself using an information service. With just a little effort to learn how to use travel databases, any traveler can make a business or pleasure journey easier and cheaper.

In this month's cover feature, find out how you can put CompuServe's online travel services to work for you. The math test is over. Put down your pencil, erase all stray marks and turn immediately to page 28.

* * * *

Beginning April 2, CompuServe will charge a $1.50 monthly membership support fee to cover rising fixed costs associated with maintaining a high level of basic service. On the same date, CompuServe is making several member support areas online free of connect charges. These include billing information, What's New articles, the Subject Index, Online Q&A, the CompuServe Tour and Profile. These services join others already connect-time free, such as the Practice Forum, Online Ordering and Feedback. More information is available by typing GO RATES.

Douglas G. Branstetter
Editor

ONLINE TODAY

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Volume 8 Number 4

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LETTERS

'Heaven on Earth'

I was reading the article about my hometown of Rolling Meadows, Ill., described as "Heaven on Earth" (Feb. issue, page 7). I assure you that while Rolling Meadows is a nice city—I have lived there for 10 years—it is neither "Heaven on Earth" nor tax-free.

Bert Stevens
Rolling Meadows, Ill.

Writer's response: Much as Mr. Stevens comments that he does not lead a tax-free existence, he does *as far as the municipality of Rolling Meadows is concerned. The town does not levy a real estate tax. If Mr. Stevens carefully examines his real estate tax bill, he will find that it is made up of various assessments from a half-dozen governmental units, none of which is the town of Rolling Meadows.*

James Moran
Online Today

Multiplayer Games

I found your cover article on multiplayer games (Feb. issue) wonderful reading. It was an accurate description of the feelings and overall thoughts of the players, from the viewpoint of the players.

I also found the accompanying article, "How to Interpret the Kesmai Screen" very interesting. It shed new light on how I previously looked at the screen while playing The Island of Kesmai. I noticed that the symbol "** a file" should read "** a fire."

I wish you would do more articles about the multiplayer games community.

Mark Pastreich
Brooklyn, N.Y.

Bilingual ATMs

As a further update to your article and recent letters to the editor concerning bilingual ATMs, I have a comment. I believe that the most advanced ATM system in the world is that of Citibank in New York.

The current ATM system, in place for more than a year, provides complete multi-lingual facilities on a full-color, touch-sensitive, 13-inch video display. After swiping your Citicard through the slot, you can use touch-screen "buttons" that are in English, Spanish, Chinese and possibly other languages, depending on the neighborhood. From that point on, all prompts and messages are in your chosen language.

It is an extraordinary system. Citibank should be recognized for its technological leadership in the consumer banking arena.

David S. Rose
New York, N.Y.

IBM Special Editorial Insert

Kudos to the editors and staff for the February *Online Today*, especially the IBM special insert. It was tops and obviously took a lot of work pulling together all the bits and pieces. I especially enjoyed the interviews with forum administrators. "Find Software Solutions Online" was extremely helpful.

Nick Egoroff
St. Petersburg, Fla.

I read the whole IBM insert and I think it's wonderful. I especially liked "Forum Faces: Meet the IBM Team," but the whole thing was very well done. This is just the sort of thing I enjoy reading—it gives real information to both veteran and novice users, and it's well-written to boot.

Guruka Singh Khalsa
Columbus, Ohio

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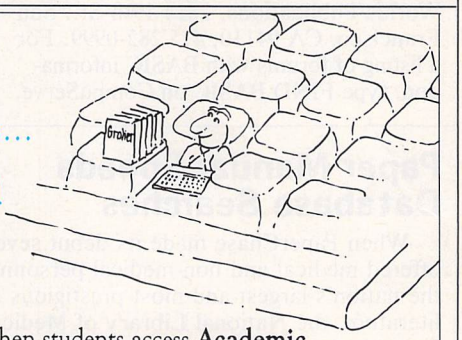

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The BASIC Teacher

If everyone around you seems to be a programming genius and you still don't understand a line of code, you might be interested in a new publication called *The BASIC Teacher*.

This monthly newsletter focuses on teaching BASIC to those who have never programmed. Published by Different Worlds, it contains helpful COPY-ME tutorials so you can learn BASIC using problems, questions and answers, and reviews. Information on using BASIC as a problem-solving computer language, including hints and techniques for structuring readable computer programs, is included.

Program examples are presented in a professional style that is structured and includes remarks that explain the BASIC statements used.

Much of the material in *The BASIC Teacher*, which is written largely by educators, is useful for the classroom, and teachers are encouraged to copy it.

A sample copy is available for $3. Annual subscriptions are available to *Online Today* readers for $24.

For information, contact Different Worlds Publications, 2814 19th St., San Francisco, CA 94110; 415/282-0999. For a listing of forums with BASIC information, type FIND BASIC on CompuServe.

King Associates

Learning Chinese with a Computer

Dartmouth College students have a high-tech edge when it comes to mastering the ancient language of Chinese. The Chinese Macintosh program allows them to hear the way Chinese characters are pronounced, watch the way they should be drawn, check the English definition and look up requested characters.

"This is a fun way to help students learn and review the characters," says Susan Blader, who teaches Chinese at Dartmouth and assisted in the development of the program. The program is a high-tech study tool and not a replacement for conventional teaching. "The only way to really learn Chinese characters is by hand," Blader says. But the popularity of the program is leading Dartmouth language professors to expand it to other languages that do not use standard alphabet icons.

Programmers at Dartmouth also have developed high-tech aids for students of the romance languages. TextWindow, which is being tested by beginning German students, provides almost instant dictionary help. "Students are more likely to ask questions and tackle harder texts if they know it is easy to get an answer," says Otmar Foelsche, Language Resource Center manager.

Computers machine-read the foreign text, then students read it on the Macintosh screen. When any word is "clicked," an English translation appears in a window. Other windows provide cultural and grammatical information.

For information, contact Dartmouth College, Centurion Building, 3 Lebanon St., Hanover, NH 03775; 603/646-3661.

The Foreign Language Forum (GO FLEFO) offers information on the use of computers in the study of languages.

Paper Manual Speeds Database Searches

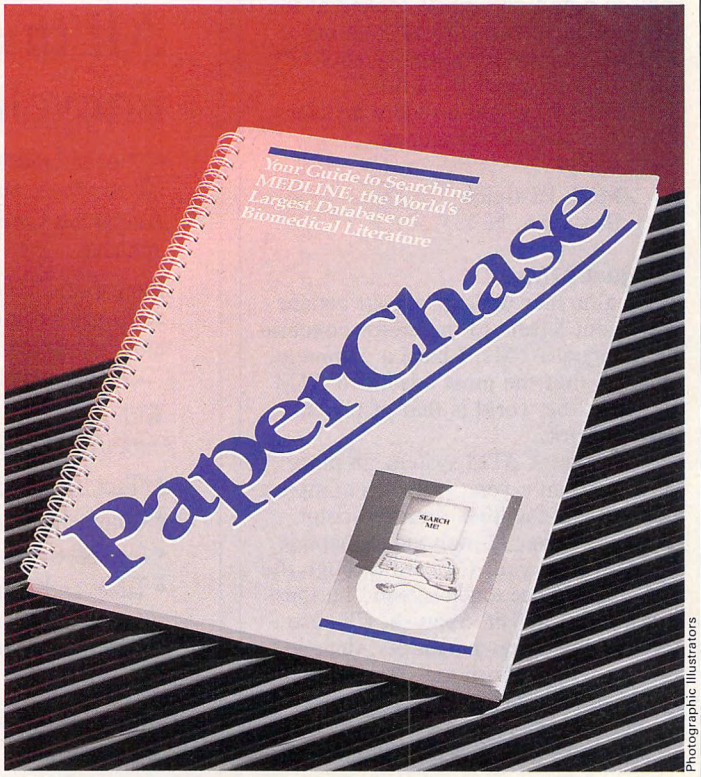
When PaperChase made its debut several years ago, it offered medical and non-medical personnel easy access to the nation's largest and most prestigious database of medical literature, the National Library of Medicine's MEDLINE. Instead of requiring medical terminology for searches, it broke new ground by allowing users to search via menus and common language. Now, PaperChase has gone a step further, and the result is *Your Guide to PaperChase*.

"With interest in health subjects at an all-time high, interest in PaperChase has never been greater nor its significance more profound," says Pat Ryan, executive vice president of PaperChase. "And now, with *Your Guide to PaperChase*, it is even easier to get prompt, efficient access."

The 135-page manual, available at no charge to CompuServe members, emphasizes how to do better routine and advanced searches. Items covered include tips for refining a search, detailed instructions for print options, a thorough explanation of PaperChase's easy-to-follow menus, and other shortcuts that help save in online connect time.

To order your free copy of *Your Guide to PaperChase*, contact PaperChase at Longwood Galleria, 350 Longwood Ave., Boston, MA 02115; 800/722-2075 or 617/732-4800. To access PaperChase on CompuServe, type GO PAPERCHASE.

—Cathryn Conroy



Photographic Illustrators

Computer Program Helps Deaf Children

Third- through sixth-graders at the California School for the Deaf in Fremont are testing a computer program that helps deaf children learn to read and write using equipment on loan from IBM's Research Division.

Scientists at IBM and the University of California, San Diego, developed HandsOn, an experimental computer program that enables students fluent in American Sign Language to use this competence to learn written grammar and vocabulary.

A survey of 8,000 deaf graduating high school students in the United States found that, on average, they read at about the fourth-grade level.

King Associates

"English is like a foreign language for deaf students. Learning to read and write is extremely difficult for them," says IBM Researcher Vicki L. Hanson, co-developer of the program. "The aim of the project is to use a personal computer, combined with new videodisc technology, to aid in developing the English skills of these children."

In mid-1987, Hanson joined Carol Padden, UCSD associate professor of communication, in developing the program, which displays stories on the computer screen in sign language and written text, accompanied by activity options.

Drawing upon their training in language and psychology, the researchers selected three stories directed at children of different age groups—"Goldilocks and the Three Bears," the adventures of a young girl during the American Revolution, and the tale of a deaf man who wanted to found a state for the deaf. Told in sign language, or "signed," by Padden, who is deaf, the stories are recorded on a videodisc and played on a standard videodisc player.

Using the computer, Hanson and Padden then developed an instructional package offering various activity options that enable students to interact with sign language and written text.

The researchers produced a second video focusing on science, with stories about cats and dogs, dinosaurs, elephants, planets, plants and whales. They plan to produce additional discs on a variety of subjects, such as mathematics and history. During 1989, schools in other states are expected to become test sites for the second video.

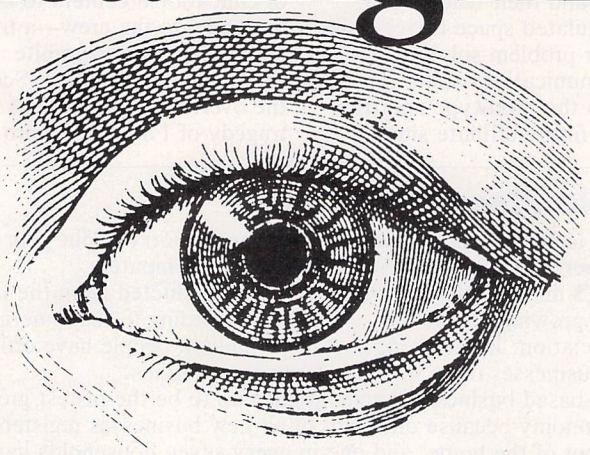
HandsOn runs on IBM PCs. Students touch the screen to indicate their activity choice and to complete tasks within each activity. They type their responses on a standard keyboard.

For more information, contact Andrea R. Minoff of IBM at 914/945-3167; Diane Morton of the California School for the Deaf at 415/794-3705; or Winifred Scott of the University of California, San Diego, at 619/534-3120.

On CompuServe, issues affecting deaf users are discussed in the Disabilities Forum (GO DISABILITIES) and the IBM Special Needs Forum (GO IBMSPEC).

—John Edwards

Hearing Aid



CompuServe's Disabilities Forum is a powerful aid for professionals who support the hearing impaired. As a member, you can access its vast online resources with your personal computer.

There's an active bulletin board brimming with pertinent questions and helpful responses. A voluminous library of news, records, and research you won't find anywhere else. And a live conference center, the scene of vigorous debate and friendly discussions. All dedicated to the special needs of the hearing impaired and people with other disabilities.

GO DISABI at any ! prompt.

CompuServe®

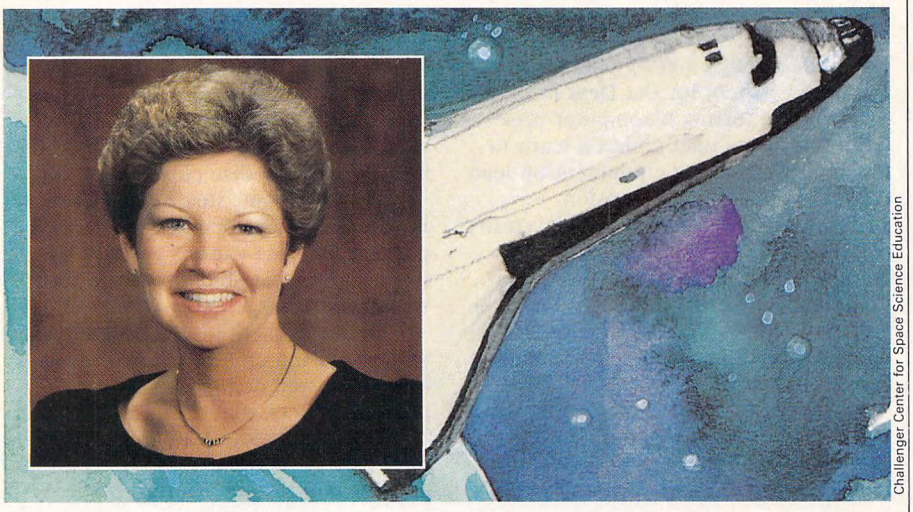
Space Learning Center Continues Mission

Three years after the tragedy of the space shuttle Challenger, an innovative math and science learning center has opened at the Houston Museum of Natural Science as a living memorial to the crew.

Named "The Space 2061 Simulator," the Houston Challenger Center affiliate site was created by the joint efforts of the Houston Museum of Natural Science, the Challenger Center for Science Education and Apple Computer. Construction of the Center was funded by a grant from the William Stamps Farish Fund.

The Space 2061 Simulator is the first in a planned national network of Challenger Center affiliate facilities that will integrate technology with a creative, interactive math and science curriculum taught in the context of space travel.

The learning facilities at the location allow students and their teachers to experience simulated space travel while enhancing their problem-solving, science and communications skills. The Houston site is the prototype and training facility for future affiliate sites.



Challenger Center for Space Science Education

The family members of the Challenger crew, led by Dr. June Scobee, chairman of the Challenger Center for Space Science Education and widow of Challenger Commander Dick Scobee, first conceived the idea for a network of educational centers to be a "living memorial to the crew—a tribute more fitting than one of granite and stone."

An educator herself, Scobee says the overriding challenge is to turn the tragedy of Flight 51-L into a triumph of American resilience and resolve. "The mission of the scientists and pioneers aboard 51-L is now our mission. It is a tribute to them and to the team of people in our nation who have come together to create the Challenger Center—not a statue or monument—but a program that brings the challenge of space more directly into the hands of this country's teachers and students."

Apple Computer donated 11 computers, time and other resources to help design the first affiliate site. Betsy Pace, Apple director of marketing for K-12 education, says, "As a company with roots in education, Apple is pleased to be part of the Challenger Center project. The Challenger Center provides a practical working model of how technology can be used to prepare children for the 21st century. It also celebrates what is possible when the community, business and educators work together for positive change.

"Because the curriculum created here stimulates the imagination and the interest of students in math and science, it provides an excellent example of how to teach critical thinking skills and teamwork as well as factual subject matter in a meaningful and exciting context. It's a model we hope will be widely imitated."

To date, more than 40 museums nationwide have expressed interest in becoming Challenger Center affiliate sites. Some of the first sites will be in San Diego, Seattle, Chicago and Atlanta.

For complete details, contact Lisa Turner at the Challenger Center at 713/488-6481.

On CompuServe, space topics are discussed in the Space Forum (GO SPACEFORUM).

There's No Place Like Home

If you want to be part of the cutting edge, don't worry about your computer's speed, but rather where you are working with that computer.

More than 13 million full-time businesses are conducted from the home and that number is growing annually by 1 million, according to the American Home Business Association. In addition, another 14 million people have offices at home for part-time businesses or to work for large corporations.

"The home-based business movement appears to be the fastest growing segment of the economy because one-third of all new businesses registered this year are operating out of the home, and one in every seven households has a business," says Dorothy E. Denton, executive director of the AHBA.

At-home businesses will inject $100 billion into the US economy in 1989. Smart corporations will take advantage of it and find out what these entrepreneurs need, including fax machines, copiers, computers, software, recorders, postal meters, folding machines and other office supplies.

The AHBA was formed recently to offer professional assistance, money and time-saving benefits to owners of home-based businesses. Annual membership is $75 and includes a monthly publication, *Home BusinessLine*, which features timely articles on every phase of operating a business efficiently and profitably, tax information that can save a home business up to $5,000 a year on deductions, a comprehensive low-cost major medical and hospitalization insurance plan, and a toll-free hotline advisory service staffed by 48 experts.

Online Today readers are eligible for a discounted membership fee ($55) and will receive the book *Working From Home* by Paul and Sarah Edwards, administrators of the Working From Home Forum.

For information, contact the American Home Business Association, 397 Post Rd., Darien, CT 06820; 800/433-6361 or 203/655-4380.

The Working From Home Forum (GO WORK) offers numerous ideas for new businesses and success tips for established businesses.

—Cathryn Conroy

Ed Taylor just found the world's greatest laser printer for $8.50.

They said it couldn't be done. But here is the true story of how it actually happened.

Ed Taylor was in the market for a good laser printer. Of course he could always trek from store to store comparing printer capabilities and costs, or rummage under his bed for last summer's buyer's guide.

But he did it the easy way.

He got on his modem and dialed up *Computer Database Plus.*

No matter what information you need from the back issue of a computer magazine, *Computer Database Plus* works. It lets you access every issue of 125 major computer publications going back to early 1987. With as little to go on as a key word, you can zero in on any one of thousands of reviews, articles, case histories or abstracts.

Almost as fast as Ed could type in "laser printer" he had tracked down eight product reviews—including the buyer's guide he remembered from last summer (which actually ran in January).

Even if the article you want has just hit the stands, you're in luck. *Computer Database Plus* is updated with almost 5,000 abstracts and articles every month from current publications.

You can get by for just a few dollars by jotting down the article title, issue and date. But Ed decided to print out the entire article. Total cost: $8.50.

So when you want the best deal, get on the line to *Computer Database Plus.* From Information Access Company, the leading supplier of information databases.

How to find what you need for practically nothing.

Start using *Computer Database Plus* right away on CompuServe or PC MagNet. Just type GO COMPDB.

Or call 1-800-441-1165 for more information.

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GO OLI for more information.

Switching Your Graphics Options

Several months ago, this column embarked on a lengthy discussion of CompuServe's Terminal/Options area. We discussed *switches* that can be set and reset for permanent or temporary changes in how things online look and behave. Most of those switches control display, log-on actions and terminal types. Then we shifted the focus to an entirely different topic: downloading and uploading. For two months, we concentrated on file transfer with binary protocols such as XMODEM, B Protocol and Kermit.

There is a method to our meandering. The background on downloading and uploading now prepares you to handle the remaining switches in Terminal/Options.

As we learned, you reach CompuServe's switch-setting section by typing GO TERMINAL or GO OPTIONS at any prompt, which brings you to:

```
**********
TERMINAL SETTINGS/SERVICE
OPTIONS
Use this area to change your terminal
type/parameters and/or service options.
  1 Instructions
  2 Change permanent settings
  3 Explanation of session vs.
    permanent
  4 Show session vs. permanent
  5 Change current session settings
Enter choice!
**********
```

If you select Option 2, you then see:

```
**********
PERMANENT SETTINGS
  1 Explanation
  2 Log-on/Service options
  3 Display options
  4 Terminal type/parameters
  5 Transfer protocol/graphic support
  6 Make session settings permanent
Type EXIT when done
Enter choice!
**********
```

Earlier columns explained the switches under Options 2, 3 and 4. The next option covers settings for transfer and graphics protocols. If you select Option 5, you see:

```
**********
TRANSFER PROTOCOLS/GRAPHICS
SUPPORT
FILE TRANSFER PROTOCOL
  1 PROTOCOL preference
    [SHOW MENU]
GRAPHICS SUPPORT
  2 GIF SUPPORT [NO]
  3 NAPLPS SUPPORT [NO]
  4 RLE SUPPORT [NO]
(Note: Please consult your software and
hardware documentation for graphics
support before changing these settings.)
Enter choice!
**********
```

In computer parlance, a *protocol* is a set of rules that allows online machines sending and receiving data to handle occasional errors caused by static on the phone lines. Usually, protocol refers to binary file transfers in downloading and uploading, but it also can refer to graphics, as we shall see in a moment.

Notice that on the first option, "File Transfer Protocol," Show Menu is the default setting. We know this because the words are in square brackets in that menu. Also, we have seen the Show Menu function in action. When we talked in previous columns about uploading to or downloading from the system, we saw a menu of possible transfer protocols:

```
**********
Protocol
  1 XMODEM
  2 CompuServe B+ and original B
  3 CompuServe A
  4 DC2/DC4 (Capture)
  5 YMODEM
  6 CompuServe QB (B w/send ahead)
  7 Kermit
  0 Abort transfer request
Enter choice !
**********
```

From here, we tell CompuServe which protocol to use for the transfer.

You can bypass this menu of protocols by pre-recording a preference in the Terminal/Options area. If you select Option 1 from the file transfer protocol menu, the system shows the available protocols and asks you to select one that is supported by your communications software. From then on, whenever you want to download or upload a file, CompuServe does not display its menu of protocols, but rather checks the choice you file here.

The remaining items on the transfer protocol menu deal with other kinds of protocols—those controlling online graphics.

In recent years, CompuServe has implemented high-resolution graphics, enabling members to send and receive digitized photographs, line drawings, schematics and flow charts. When a picture file is accessed, the computer displays the top row of dots or pixels, then moves to the next row, and so forth. Usually, two kinds of formats are supported:

- RLE (Run Length Encoded) files are displayed in a 256-by-192 pixel arrangement. The pictures usually are in monochrome.
- GIF (CompuServe's Graphics Interchange Format) pictures are displayed in a larger layout. Also, the pixels can be in one of several colors.

As the menu indicates, NAPLPS, another format called the North American Presentation Level Protocol Syntax, also is supported, though at this writing there were few NAPLPS-based graphics online.

The RLE format is the older one on CompuServe. GIF was introduced in the spring of 1987, intended as a standard for exchanging raster-based images among various computers. GIF makes it possible for a picture created on one kind of computer to be downloaded and displayed on entirely different machines. GIF technology can also preserve images with a resolution beyond the capabilities of most of today's small computers. It can define images of more than 16,000-by-16,000 individual dots, even though the average computer screen is only 320-by-200 pixels. GIF graphics can handle up to 256 simultaneous colors, making the best use of a computer's own capabilities. In other words, if a downloaded graphic has more colors than the receiving computer can display, the graphics display software takes its best shot. Obviously, some detail will be lost, but the image is still recognizable.

Most public-domain software for viewing and creating GIF graphics is available for four groups of computers: the IBM PC and compatibles with graphics capabilities, the Commodore Amiga, the Atari ST and the Apple Macintosh family. Encoders and decoders are being created for other computers such as the new Apple IIgs.

Basically, seeing the online art requires:

- The hardware. A computer that can display graphics, either in monochrome or color. For some systems, that is standard equipment. For others, you need a graphics enhancement card.

- The software. A communications program such as CompuServe's Professional Connection, VIDTEX, or the CompuServe Navigator program as well as other commercial and public-domain terminal programs. Consult the forums that support your computer for information on such software.
- Configuration. Setting your Terminal/Options correctly is the easiest part. Set the appropriate options on this menu, where Options 2, 3 and 4 deal with graphics.

Online pictures appear throughout the system in menus and forum libraries. Public-domain utility programs exist for some computer types that allow you to download the artwork and view it offline. Again, check the forums that support your computer.

Once you have the appropriate software, hardware and configurations, the easiest way to look at a picture is to visit one of the menu-driven galleries.

For instance, CB Simulator users have established a collection of photos of themselves. To see it, type GO CBPIX, then select the menu number for the photo you want to see. The system clears your screen and displays the image. Graphics also are available in some forum libraries and they are as easy to display there.

The online graphics forums are good sources for online art. Operated by Larry Wood, the forums are:

- The Graphic Support Forum (GO PICS), which provides support for hardware and software used to create and view graphics.
- The Art Gallery Forum (GO GALLERY), home for graphics picture files (and their artists). Aimed at medium-to-high-end users and offers elaborate 16-color images.
- The Quick Pictures Forum (GO QPICS), which supports members who want to view smaller, simpler online graphics files.

Besides art, the forums have message boards full of tips for displaying the artwork with a variety of computers. To examine the galleries, type NAMES at any forum prompt to see the library names. To access an interesting library, type LIB followed by the library number. For instance, type LIB 8 to access Library 8.

In forum libraries, graphics files have special extensions, such as .GIF or .RLE, so to browse your chosen subtopic, type BRO *.GIF or BRO *.RLE. This produces a list with a description of each file. When you have found one that looks interesting, you can download it with a binary file transfer protocol (XMODEM, B Protocol or Kermit) for offline use, assuming you have a utility for displaying it. Programming wizards in the various computer-specific forums have been writing such utilities and contributing them to the public domain.

Also, some terminal programs allow you to view the artwork online. Check the documentation for your program or ask the folks in the online picture forums (GO PICS).

Charles Bowen and David Peyton co-authored How to Get the Most Out of CompuServe. *Bowen's CompuServe User ID number is 70007,411. Peyton's is 76703,244.*

Each issue of *Online Today* is filled with information which CompuServe subscribers benefit from having close at hand for reference.

Use these handsome binders and slip covers to store and protect your back and future editions.

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Note: Satisfaction guaranteed by Jesse Jones Box Corp. (since 1943). Allow four to six weeks for delivery. Add $2.50 per unit for orders outside the U.S.

Time-saving Programs Ready in Forums

The libraries in CompuServe's forums are filled with thousands of files. The following are a few of the files uploaded to the forum libraries in recent months. For a more up-to-date list, check the weekly "Uploads" columns in *Online Today Daily Edition* by typing GO OLT-3700 at any CompuServe Information Service prompt.

AMIGA ARTS FORUM
(GO AMIGAARTS)

Graphic Display Program—Version 2.0 of David Grothe's Superview graphic display program can be used from CLI or Workbench. New options include scrolling in super bitmap pictures, display of overscan pictures, brushes, PhotonPaint and DPII. File SVII.ARC in Library 9.

AMIGATECH FORUM
(GO AMIGATECH)

Screen Changer—A program used in association with Workbench to change the WB screen resolution from normal to interlace and vice versa. Double click instead of rebooting. File WBLCE3.ARC in Library 13.

ATARI PRODUCTIVITY FORUM
(GO ATARIPRO)

Disk Accessory—Version 2.0 of Hyper Copy/Formatter, a PD disk copier/formatter from Germany. Control interleave, sectors/track, tracks/disk and more. File HYPCPY.ARC in Library 4.

BORLAND APPLICATION FORUM
(GO BORAPP)

Sidekick Enhancement—New version of Appointment. Displays daily appointments in a Sidekick Plus appointment file from a batch file or at the command line without invoking Sidekick Plus. File APP.ARC in Library 2.

BORLAND PROGRAMMING FORUM B
(GO BPROGB)

Box Maker—A pop-up TRS shareware program that enables you to design boxes using any of a number of line drawing characters. File BOX.ARC in Library 0.

COLOR COMPUTER FORUM
(GO COCO)

Biorhythms—A biorhythm charting program for the CoCo 3. File BIORYT.BAS in Library 11.

COOKS ONLINE FORUM
(GO COOKS)

Turkey Tutor—Basic information for selecting, cooking and carving turkeys. File TURKEY.TXT in Library 4.

GENEALOGY FORUM
(GO ROOTS)

Connections—Gary Boyd Roberts, director of publications at the New England Genealogical Society, has found that George Bush and Dan Quayle are distant cousins. Bush is also related to Abraham Lincoln, Ulysses S. Grant, Richard Nixon and Marilyn Monroe. File BUSH.REL in Library 7.

IBM APPLICATIONS FORUM
(GO IBMAPP)

Item Tracker—A program to keep track of an unlimited number of household items. Sort by item name and room name. New version includes a database repair program. File PERINV.ARC in Library 7.

IBM COMMUNICATIONS PROGRAM
(GO IBMCOM)

Communications Program—GT Power, a communications program for IBM PCs and compatibles that provides complete communications capabilities including a host mode. Supports numerous protocols and a variety of modems including all Hayes compatibles, US Robotics and IBM. File GT14.TXT in Library 3.

IBM HARDWARE FORUM
(GO IBMHW)

More K Per Disk—New version of Maxi-Form disk formatting utility that gives 420K on a 360K drive, 800K on a 720K drive, 1.4MB on a 1.2MB drive and 1.6MB on a 1.44MB drive. Shareware. File MAXI.ARC in Library 1.

IBM SYSTEM/UTILITIES FORUM
(GO IBMSYS)

Virus Treatise—Rob Rosenberger and Ross Greenberg say that the myths about computer viruses may be more damaging than the viruses themselves. The authors explain viruses, note their limitations in spreading to other computers and offer useful tips in guarding against an attack. File MYTHS.ARC in Library 8.

INVESTORS' FORUM
(GO INVFORUM)

Retirement Planner—A new version of Automated 1-2-3, a Lotus 1-2-3 retirement planning tool for recipients of lump sum distributions from qualified benefit plans. Shareware. File IRA.ARC in Library 7.

JOURNALISM FORUM
(GO JFORUM)

Simple English—A program for IBM PCs and compatibles that identifies and suggests uses for the "Basic 850" English words most commonly known to those for whom English is a second language. File BASICE.ARC in Library 4.

MAUG HYPERFORUM
(GO APPHYPER)

Kids' Stack—A brief self-running text/graphics example of Alphabet Pictures, a shareware stack for children, featuring animated pictures, digitized sounds, music and automatic spelling. File ABCTXT.SIT in Library 3.

MAUG MAC FUN FORUM
(GO MACFUN)

Talking Moose—Zippy, the talking moose, for use on any Macintosh. Requires the Macintalk speech driver and runs in background under multifinder. File ZIPPY.SIT in Library 3.

MAUG MACINTOSH BUSINESS USERS' FORUM
(GO MACBIZ)

ZIP in Manhattan—New version of Manhattan ZIP Code Locator, a shareware program that finds a Manhattan ZIP code for a given address. Also includes ZIP code map of Manhattan, brief neighborhood label and cross street for avenue address. File NYC in Library 3.

MICROPRO FORUM
(GO MICROPRO)

WordStar Help—A memory-resident program that frees WordStar 5 when it locks up. File WSFREE.COM in Library 13.

NOVELL USERS' FORUM
(GO NOVUSER)

Network Games—A shareware file containing two-player games for the Novell Network. Will not run on a stand-alone basis. File FEWGME.ARC in Library 10.

VETERANS FORUM
(GO VETFORUM)

Agent Orange for All—A textfile taken from a speech given by a Vietnam veteran activist who claims that nearly everyone who served in Vietnam was exposed to Agent Orange. File SPEECH.LET in Library 3.

WORDPERFECT SUPPORT GROUP
(GO WPSG)

WordPerfect Update—A textfile describing the most significant enhancements in the maintenance releases of WordPerfect 5.0 and a brief notice of maintenance releases Library 2.0. File MAINT.REL in Library 10.

David Peyton co-authored How to Get the Most Out of CompuServe. *His CompuServe User ID number is 76703,244.*

Timing Stock Purchases Essential

Online Services Help Track Systematic Market Risk

by Mike Pietruk

Selecting the right stocks is essential to successful investing, but it is just as important to time those purchases to take advantage of market moves.

Studies demonstrate that as much as 50 percent of a stock's price action can be explained by "systematic market risk." While no one knows where stock prices will be tomorrow, or six months or a year from now, certain indicators have shown an amazing capability for giving investors a handle on whether stocks are overpriced (prices are likely to go down) or undervalued (prices are likely to go up).

Institutions have developed complex models using hundreds of variables and equations in an effort to gain an edge on market timing. Some of these models have filtered down to individual investors in software packages costing, in some instances, several hundred dollars. However, for the average investor building a nest egg, these programs are neither cost effective nor practical.

Fortunately, for the type of trading most of us do, these systems are not necessary. Instead, a few simple tools can give us the edge we need. Perhaps the most straightforward of these is the Dow Jones dividend yield model (dividend yield is the percentage of a stock's price returned each year as dividend payments) used exclusively by Geraldine Weiss in her biweekly *Investment Quality Trends* newsletter. This theory holds that stock prices routinely fluctuate between identifiable extremes of high and low yield, signifying under- and overvaluation.

Weiss has discovered that historically the market is overpriced and subject to decline when the 30 Dow Industrials yield 3 percent and long-term investments are undervalued at 6 percent.

The total dividends for the 30 stocks comprising the Dow average was recently $76.41 for the preceding 12 months. That translates to the Dow being overvalued at 2,547 (3 percent of 2,547 is $76.41) and undervalued at 1,274.

It's easy to keep tabs on the Dow with the ticker symbol DJ 30 in Current Day Quotes (GO QQUOTES). As firms regularly change the payout to shareholders, the target numbers must be revised accordingly. Therefore, it is a good idea to prepare a ticker file of the Dow 30 stocks and periodically update the numbers in GO DIVIDENDS. (The up-to-date listing of Dow stocks appears regularly in *The Wall Street Journal*.) For help in creating and putting ticker files to work, type GO TICFIL.

A similarly useful market barometer is the dividend yield on the Standard & Poor's 500 Stock Index (total annual dividends paid on the 500 stocks constituting the index divided by the index value). Available as part of the Issue Examination report (GO EXAMINE) by using the symbol SP 500, it has had an uncanny track record of predicting market peaks, including the 1987 top and the major decline of 1973-74. Here again, the magic number to look for is a yield of only 3 percent signaling a market top and 5 percent to 6 percent suggesting a time of extraordinary value. Numbers in between this range can be used to determine the current risk/reward of being in the market.

A third market timing aid is the earnings yield ratio. This gauge looks at the difference between the earnings yield on the S&P 500 and the return on three-month US Treasury bills. The earnings yield is defined as the aggregate per share earnings of the S&P 500 stocks divided by the current index value.

Discussing that market yardstick in a recent *Wall Street Journal* article, Robert Arnott, President of Xerox's First Quadrant Investment Advisory Unit, stated that investors should be cautious when the earnings yield falls below the T-bill rate. Investors who followed this value measure would have exited to the sidelines prior to the bear markets of 1969, 1973, 1981 and the "Black Monday" collapse of October 1987.

Although it seems to perform well as a selling guide, the earnings yield ratio is less conclusive in picking market entry points. Warns Arnott, "Investors should wait until earnings yields are at least 2 percentage points above T-bill yields before they begin to see it as a positive signal."

The data needed to calculate the earnings yield also may be found in the Issue Examination Report for SP 500. Simply divide the 12-month EPS by the closing price. To retrieve rates on three-month (91-day) T-bills, use the symbol USTBA in the historical pricing programs such as PRICES (GO PRICES).

For those seeking a more sophisticated model, consider the expected rate-of-return barometer. This yardstick begins by taking the current dividend yield on either the Dow Jones 30 Industrials or the S&P 500 and adding in an estimate of the growth rate of corporate earnings. Although this might sound complicated, this number has historically averaged about 3.2 percent above the rate of inflation. The rate of inflation is usually expressed in terms of the Consumer Price Index announced monthly by the US Commerce Department and reported under the symbol CPIS in MicroQuote. The CPI and other government economic statistical releases are regularly projected and thoroughly analyzed in the biweekly *Current Economic Briefings* written by MMS International (GO MMS), a respected multinational supplier of financial research and forecasts.

This yield/growth computation produces a measure of anticipated return on stocks that then can be compared with the yield to maturity of 30-year government bonds, found in the Bond Buyer Index to 30-year Treasuries tracked via the ticker symbol BBMC in MicroQuote. According to William Fouse, chairman of Mellon Capital Management, whose comments appear in the same *Wall Street Journal* article, the number for stocks should be 3.5 percent to 4.5 percent above the return on 30-year Treasury bonds. If the margin is less than 3 percentage points or greater than 5, that is a clearcut indication either to sell or buy, respectively.

There are several points to keep in mind regarding these indicators: Their track records have been outstanding, but past results do not necessarily guarantee their reliability in the future. Using them implies acceptance of the principle that the financial markets will repeat patterns of the past—a concept disputed by many. These rules are more likely to be useful gauges if used in conjunction with one another rather than individually. And, above all, they are suggested as strictly long-term market barometers and should *never* be used to make short-term trading decisions.

Mike Pietruk is a forum administrator of CompuServe's Investors' Forum (GO INVFORUM) and an assistant vice president of Preferred Savings & Loan in Chicago. His CompuServe User ID number is 76703,4346.

Screening for Value: A Step-by-Step Guide

by Mike Pietruk

As readers of financial news know, it is a cautious time for investors. International economist Raveendra Batra has been on a year-long tour promoting his best seller, *The Great Depression of 1990*. A respected advisory service, Richard Russell's Dow Theory Letters, and Growth Stock Outlook, published by Charles Almon, state that the financial market is in a primary down trend.

Consequently, it is not surprising that many investors are shunning stocks in favor of the safe harbor of money market funds and other non-volatile financial instruments. Yet, historically, stocks have offered the greatest potential return, averaging 9.8 percent since 1926.

Value-oriented investors such as *Forbes* columnist David Dreman and Geraldine Weiss, publisher of the Investment Quality Trends advisory service, find stocks to buy despite an otherwise negative long-term outlook by setting value parameters, then screening the thousands of issues traded to find those meeting their criteria.

This otherwise monumental task can be accomplished online in minutes with CompuServe's Company Screening program (GO COSCREEN), which sifts through fundamental financial information from Disclosure II's files of more than 10,000 domestic corporations. Screening is performed on the most up-to-date data available when combined with MicroQuote II's (GO MQUOTE) previous day closing prices on common stocks.

Any or all of 24 user-definable parameters can be searched using COSCREEN:

```
********************************

 1 Primary SIC Code          13 Debt/Equity Ratio
 2 State                     14 Market/Book Ratio
 3 Total Assets              15 Current Ratio
 4 Book Value                16 Return on Assets
 5 Market Value              17 Return on Equity
 6 Sales                     18 Return on Sales
 7 Net Income                19 Earnings/Share
 8 Cash Flow                 20 Cash Flow/Share
 9 Latest Price              21 Price/Earnings Ratio
10 4 Yr Growth Rate-Sales    22 Yield
11 4 Yr Growth Rate-Net      23 Price Position
12 4 Yr Growth Rate-EPS      24 Price Volatility

********************************
```

To construct a list of potential conservative, value-oriented investment candidates, I began by selecting Option 14, "Market/Book Ratio," to screen for firms selling stock for less than book value. I defined the search rule "LT1" and quickly learned that 2,010 companies had a market/book ratio less than 1.

Because dividends are an important indicator of a corporation's health and stability—in weak markets they often cushion the price drop of a stock—I next selected Option 22, "Yield," and eliminated all firms paying dividends of less than 3 percent. The list was narrowed to 346.

Too high a yield can be a red flag warning of problems within the firm or industry, so I screened again to eliminate companies with yields greater than 10 percent. Thirty-two failed this litmus test, leaving me with 314 possibilities.

In times of uncertainty, Weiss and other advisors advocate sticking with large, well-capitalized blue-chip companies. Defining parameter 3, "Total Assets," with the rule GE200 trimmed the list of possible investments to 237, as firms with a market capitalization (share price times number of shares outstanding) of less than $200 million were discarded.

As a small-time investor, I prefer lower-priced issues. To further screen, I selected Option 9, "Latest Price," and typed LT40 to identify which of the 237 companies were selling stock for less than $40 a share. Thirteen firms had higher priced stock, leaving 224 firms remaining for my consideration.

Cash flow can also reveal a lot about the financial well-being of a business, so I next selected Option 20, "Cash Flow/Share" and asked to be shown only companies whose annual cash flow per share is a minimum of 10 percent of stock price. This implies that eight years of cash compounded at 8 percent annual interest would, at a minimum, equal current price. Not surprisingly, this narrowed the field dramatically to a manageable 15 names.

Now I felt comfortable producing a report showing me exactly which firms met my strict criteria. Several report formats are offered. I also saved the ticker symbols for the 15 stocks as a ticker file (named LOBOOK.TIC) facilitating use of the symbols in other CompuServe financial services. The report cost $12.50 in surcharges ($5 for the report and $.50 per company reported)—quite a bargain, considering the time it saved me. It is important to note that you can redo, cancel, restart or modify COSCREEN searches whenever desired. It is only when you actually request a list of the companies that you are surcharged.

Screening is a number-crunching process—it cannot perform value judgments and therefore is not an end in itself. Further analysis is necessary before deciding what to do with the information it has sifted. CompuServe offers a variety of investment research tools to help you make a reasoned decision.

After leaving COSCREEN, I accessed the Issue Examination program (GO EXAMINE) to get an overview of the 15 firms on my list. At the Issue prompt, I entered the name of my ticker file proceeded by an asterisk (*LOBOOK.TIC in this instance) and received detailed descriptive summaries of each of the 15 firms. Included as part of the reports, which cost $1.25, were data on price history, trading, capitalization and risk. Only five firms carried an investment quality "A" or higher quality rating from Standard & Poor's.

Next, it was off to Standard & Poor's database, S&P OnLine (GO S&P), where I gathered additional background information on the five remaining candidates. The Company Information section of S&P OnLine profiles approximately 4,700 publicly traded firms. S&P updates its database weekly with the date of the last revision for any report section clearly indicated at the top of every page. Provided are a detailed business background (often supplemented with a product line table), an outlook as foreseen by S&P analysts, earnings and dividend performance, market trading activity and selected financial statistics for the past four years. Individual S&P profiles carry a $1 surcharge.

Now I was equipped with a total picture on which to base my final choices. Naturally, your list of stocks will vary from mine based on which variables you select to screen and how you choose to define them. Regardless of your choices, you can quickly customize a portfolio to meet your investment objectives at a small fraction of the cost of hiring a professional money manager. If you use a discount stock broker, the cost of your research will be more than offset by your savings on commissions.

Mike Pietruk is a forum administrator of CompuServe's Investors' Forum (GO INVFORUM) and an assistant vice president of Preferred Savings & Loan in Chicago. His CompuServe User ID number is 76703,4346.

What's in a *NAME?

by Michael Houdeshell

*NAME, a feature now available in 17 financial services on CompuServe, enables you to look up ticker symbols, CUSIP numbers and descriptions on stocks, bonds, options, market indexes and mutual funds without leaving the program you are using. To use *NAME within a service, at the Issue prompt, type an asterisk (*) followed by the first word in the company's name.

Services offering the *NAME capability alert you with a message preceding the request for issue identifiers. Further information is available through online help screens that can be viewed by typing /HELP at the Issue prompt.

If your search yields a small selection, the issue identifiers are displayed automatically. If the partial name you provide matches numerous issues, *NAME asks whether you would like to see the list or continue the search, narrowing the set of eligible securities. Depending on the particular service, you can use *NAME to hunt for common and preferred stocks, bonds, market indexes and mutual funds—even those with puzzling tickers.

Mike Brown, supervisor for application development and support in charge of the development of the *NAME feature, says it is part of an overall integration and standardization of CompuServe's financial services. Those enhancements were, in turn, part of a larger ongoing project at CompuServe: the systematic renovation of all financial products to make them sleeker, more powerful and easier to use.

"It was a team effort," says Brown. "We worked on standardizing navigation and installing features across the board to make all products react in the same way. The goals of our group were to standardize the issue and date prompting in the products, and to add the *NAME company searching capability."

Brown says the purpose of the project ran counter to Murphy's Law—all the changes and new features had to work right ... together. "We were trying to get the same functionality and the same features at the Issue prompt in all of the products, so that when a user went into one, he could put in multiple ticker symbols *or* a ticker file *or* perform a company name search. But the *NAME feature really ties in heavily with the Issue prompt because that is where you use it. So the recoding of the issue prompting had to be done first.

The challenge, says Brown, was that the feature had to work differently in different products. If a user searches for IBM's ticker using *NAME in Quick Quote or the Single Issue Historical Pricing service, the feature presents a menu of IBM securities arranged by issue type. Some of the other services that offer *NAME, however, work with only a single class of securities—usually equities.

Fortunately, Brown's team didn't have to start from scratch. A primitive version of *NAME had been implemented in Quick Quote. So the assault on the *NAME project took an odd route: First, develop a more complex version for Quick Quote, then alter parts to make it compatible with other services.

Brown explains the rationale behind this upgrade/downgrade strategy: "Quick Quote's previous *NAME feature wasn't as slick as the version we devised. For one thing, it didn't produce the breakdown by issue type. What we had to do was develop the new *NAME feature in Quick Quote, then take the same piece of code and rework it for several other databases, because underneath the surface, you're accessing different databases for the different products. We made it work for the Historical database products, such as PRICES, EXAMINE, DIVIDENDS, PRISTATS and TREND. We also adapted it to the company research services—Disclosure II, Ticker Retrieval, I/B/E/S and Value Line. Actually, there are six versions of *NAME for the different databases."

Technology aside, the purpose of *NAME is to make financial services more user-friendly. "Many users of CompuServe's financial services are not high-rollers," says Brown. "They're small investors who are not necessarily familiar with ticker symbols. These people will find *NAME helpful."

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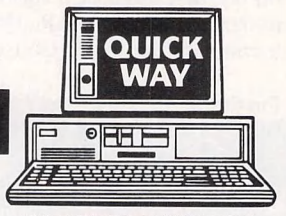

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Inside Consumers Union

Product Testing Often Reveals Possible Safety Hazards

by Cathryn Conroy

Watching paint crack and peel, slopping sticky food onto hundreds of dinner plates and saturating tissues with water is serious business to employees of Consumers Union, publishers of the time-honored and respected *Consumer Reports* magazine. This monthly publication does more than let you in on which toaster or microwave oven is the best buy for your money; it also provides critical health and safety information that may not be found elsewhere—not even from the federal government.

A case in point: when the best-selling Suzuki Samurai sport-utility vehicle was tested last year by Consumers Union, an independent, nonprofit organization, it failed miserably. As part of the test, the driver was instructed to dodge an obstruction in the road. The Samurai reacted by starting to roll over. "We realized we were on the threshold of a serious new phenomenon," says Dr. R. David Pittle, technical director of Consumers Union. That phenomenon is indicative of the power of the magazine, which doesn't accept advertising or allow its name to be used in product advertising. Following publication, sales of the car plummeted.

This was not the first time Consumers Union uncovered vital safety hazards. Another recent example involved the Clean Water Machine, a water purifier sold by Norelco. In 1982 *Consumer Reports* discovered that the filter contaminated water with methylene chloride, a probable carcinogen. Although sales of the machine were never good and Norelco stopped selling the purifier in 1984, sales of the replacement filters continued. It wasn't until September 1988 that a Federal Trade Commission administrative judge ruled on the case and charged Norelco with false advertising. Both Norelco and the FTC, however, admit that some of the old contaminated filters may still be on retail store shelves because they have never been subject to a government recall.

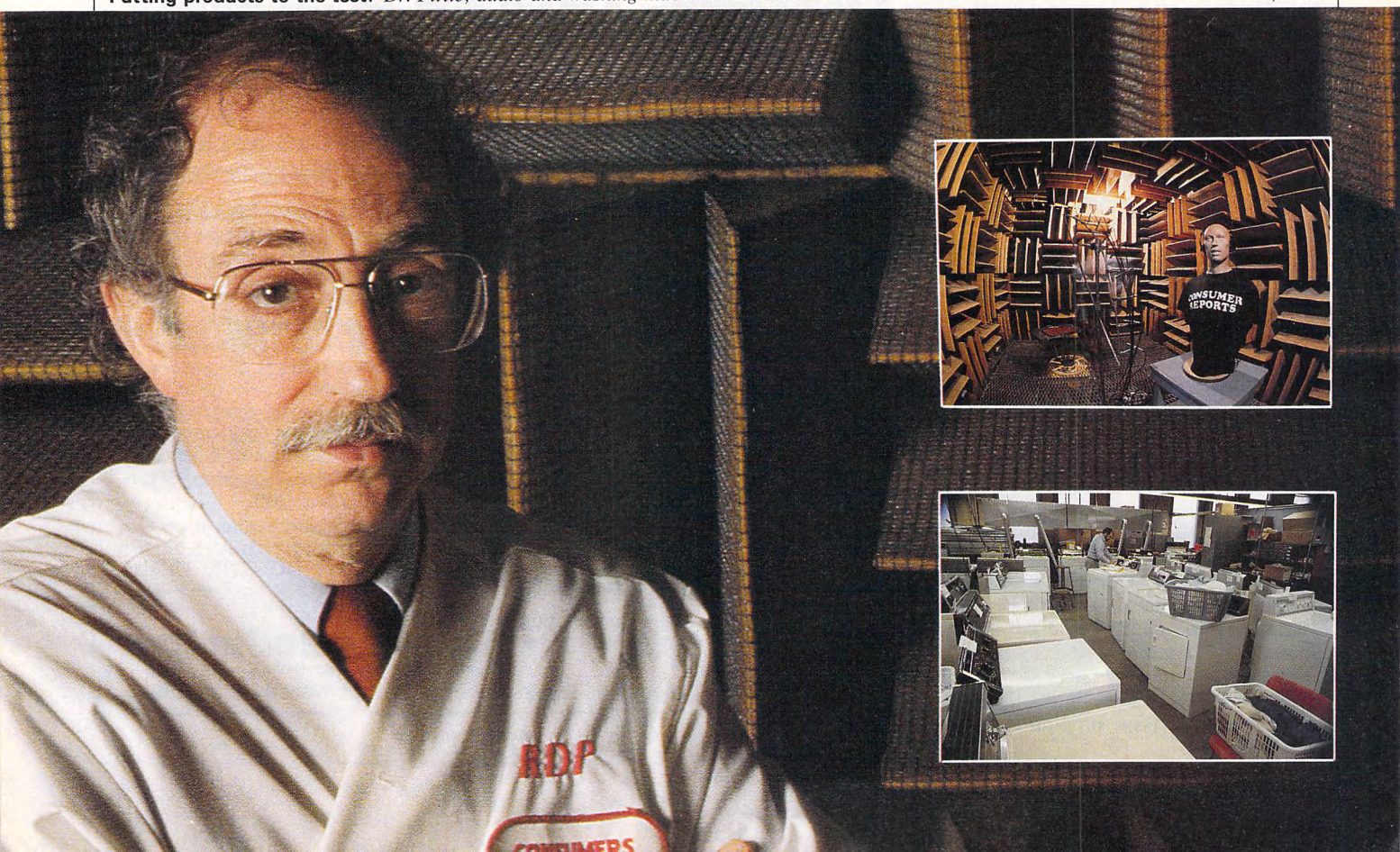
Consumers place great trust in *Consumer Reports*, according to a Louis Harris & Associates poll. Respondents said that the publication "does a better job protecting the interests of consumers" than Better Business Bureaus, the Consumer Product Safety Commission, Ralph Nader, state and federal governments, and private industry.

People—from consumers to government officials to corporate leaders—listen when *Consumer Reports* speaks. And its pronouncements have a powerful impact on sales, advertising, corporate revenues and stock market performance. David C. Berliner, assistant director of Consumers Union, says, "They trust us because they have every reason to do so. In our 53-year history, we have never violated the public's trust. You can't say the same thing about the government. Look at most federal agencies and you'll find that there have been problems both great and small regarding their competence and lack of candor."

Consumer Reports began publication in December 1936 with the mission of providing information and advice to consumers on goods, services, health and personal finance. Products re-

Putting products to the test: *Dr. Pittle, audio and washing machine test rooms*

Garry Burdick



viewed in that first issue included breakfast cereals (deemed to be cheap and filling although not necessarily healthful), inexpensive women's stockings, lead hazards in toys, Grade A versus Grade B milk, soaps (best buy: Gondola from Woolworths, which sold for 5 cents a cake), and tips on how to select a toothbrush.

Although current issues of the magazine offer the best buys in such high-technology goods as compact disc players, videocassette recorders and electronic keyboards, the mission has remained the same.

Each month a handful of new products is reviewed in a way unlike any other. Which tissues are best for your winter cold? Consumers Union tests them all in the Sneeze Machine, a contraption created by stretching each tissue in an embroidery hoop and saturating it with water from a paint sprayer. Only the best won't be blown apart by a test like that.

Then there is the Mattress Basher, which repeatedly plunges its long electronic arms, equipped with bowling ball hands, into the mattress springs. Even kids can't jump on a mattress with this force.

If you're concerned that your luggage might not survive the rough handling of the airlines, check out the *Consumer Reports* rating. If it has passed the test of the Gorilla—a huge machine that resembles a clothes dryer and tosses and turns a suitcase 666 times and then drops it 2,000 times—it will survive any treatment an airline baggage handler might dish out.

Some of the tests are a bit more tedious to perform. For instance, lawn mowers are tested over a three-month period. Latex paints are tested for fading and mildew in the hot Florida and Texas sunshine.

Before a product can be tested, however, it must be selected for review by Consumers Union. The process is a complex and intense one that takes place each spring. A number of criteria are considered, including letters and calls from subscribers, the expertise and opinions of Consumers Union staff members, consumers' opinions from surveys conducted by CU and the results of the annual questionnaire offered to subscribers.

Cathryn Conroy is a contributing editor of Online Today. *Her CompuServe User ID number is 70007,417.*

Consumer Reports Offers Articles Online

Consumers Union recently began electronic publication of *Consumer Reports* on CompuServe as one more way to communicate its message of product value and safety. The online version of *Consumer Reports* magazine (GO CONSUMER) offers the full text of selected monthly print magazine articles.

Accessed through menus, the service allows you to select reviews of household appliances and home electronics, including audio equipment components, washers and dryers, VCRs, computer printers, coffee makers, air conditioners, refrigerators and microwave ovens. Articles are presented alphabetically under subject headings, making the information easily accessible and the search process fast and efficient. Information covering automobiles will be added in the future. Selected articles are added on a monthly basis, making the database concurrent with the print edition.

In addition to regular CompuServe connect-time fees, the Consumer Reports database carries a surcharge of $2 per article.

Consumers Union "has never violated the public trust": *Berliner, space heater, air conditioner test rooms*

Garry Burdick

Demographic Reports Show Neighborhood 'Personality'

by Cathryn Conroy

When Eben Kent decided to move from Chicago to Columbus, Ohio, to accept a job with CompuServe, he knew that selling his home would be a challenge. The neighborhood the Kents lived in was quite diverse; although the immediate area around them was well kept and relatively safe, the area just one block west was considered dangerous.

Kent and his wife, Carolynne, decided they needed to help in marketing the neighborhood, pointing up the good aspects to a prospective buyer. To do this, Kent, a subscriber long before he accepted employment with CompuServe, accessed the Neighborhood ZIP Report and ran a profile of his community. Along with copies of recent newspaper articles that promoted the neighborhood, Kent asked the realtor to distribute the demographic summary to prospective buyers.

"The Neighborhood ZIP Report provided a broad brushstroke of the makeup of the people in our neighborhood," he says. "It became another selling tool for us." And it must have worked well, for the Kents sold their home in about half the time it usually takes to sell a house in Chicago, and they made money on the deal.

Before the moving van arrived, however, the Kents were off to Columbus to find a new home. Unfamiliar with the area, they relied on the advice of a realtor to locate a new neighborhood. Because they have a child, they wanted to live near good schools.

The realtor suggested a neighborhood they had never considered and knew nothing about, but before turning it down, Kent ran another Neighborhood ZIP Report. He was impressed with what he saw and bought a home there. "The statistical information made us feel comfortable with the neighborhood. It should never be the sole means of determining where to buy a house, but it can be used as another piece of the puzzle. I also found that it helped me to ask good questions of the realtor, questions I might not otherwise have thought of."

CACI Inc. of Fairfax, Va., provides four types of Neighborhood ZIP Reports: the Neighborhood Demographics Report, the Neighborhood Civic/Public Activity Report, the Neighborhood Sports/Leisure Report and the Neighborhood Gift Idea Report. Each report is surcharged $10 and can be generated for any appropriate ZIP code. (The database does not include business or post office box ZIP codes.)

The Neighborhood Demographics Report offers general statistical information on an area, including age groups, household income, occupation, types of households (How many single men are there? How many married couples?), race, percentage of dwelling units that are owned and rented, the average home value, the average rent and when the housing was built. The numbers give an overview of an area, telling at a glance if most people own their own homes, what sort of jobs they hold and how much money they earn. The information on age, household income and race reflects 1988 updates; all other information is based on the 1980 US Census Report. (See accompanying sample report.)

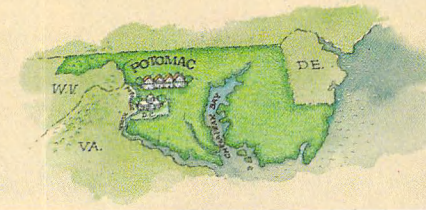
In addition to the general demographic information, three specialty reports zero in on specific interests and activities in which residents of an area are likely to participate. Consumer behavior and purchasing patterns are analyzed, and using an index of 100 as the US average, each activity is rated for the likelihood of its popularity in that neighborhood. For instance, an activity that has a rating of 167 would be very likely to occur, while one that was rated 86 would be less likely to be popular in that town. The information is updated annually based on extensive interviews with 40,000 households.

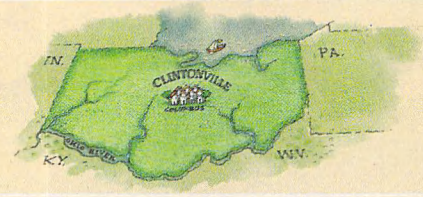
A Closer Look: Three Examples

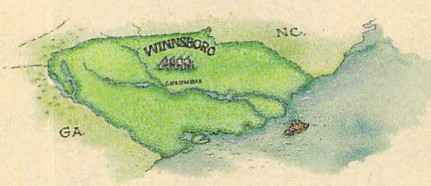
Let's examine three towns and find out how these reports can work for you. All of the towns are suburbs of major cities. Potomac, Md., known for its sprawling estate homes of the rich and famous, is close to Washington, D.C. More than half the residents earn more than $75,000 annually.

Clintonville, a community that is part of northwest Columbus, Ohio, is home to many professors from Ohio State University and other executives and professionals. The area is populated by a high number of senior citizens as well as young families; average income is $35,000.

Winnsboro is a milling town about 30 minutes from Columbia, S.C. The majority of its residents earn less than $25,000 with 38 percent earning less than $15,000 annually.







A rating of 100 represents the national average.

POTOMAC
Civic/Public Activity
Membership on school or college board 207.5
Union 76.1
Contributions to local public TV station 244.6

CLINTONVILLE
Civic/Public Activity
Membership on school or college board 143.8
Union 88.5
Contributions to local public TV station 159.5

WINNSBORO
Civic/Public Activity
Membership on school or college board 95.5
Union 100.3
Contributions to local public TV station 65.4

Paul Montgomery

The Neighborhood Civic/Public Activity Report is perhaps the most useful of all of the specialty reports for someone interested in buying a home in an unfamiliar area. It is from this report that the social consciousness of a community can be assessed: How many are likely to participate in school, hospital and church boards; belong to a union, fraternal club or religious group; have voted in an election; written to a public official; taken an active role in a civic activity; or given money to the local public television station?

The Neighborhood Sports/Leisure Activity Report will indicate how people in a certain area are most likely to spend their leisure time. Will they play racquetball, ice skate, run, read books, gamble, or stay home and entertain friends? This can be useful for those who want to meet others with similar interests.

Finally, the Neighborhood Gift Idea Report is more than an early Christmas list. It will offer information on the likelihood that certain consumer products will be purchased, thus revealing a lot about a community's buying patterns. For instance, is a car burglar alarm more popular than a night at the theater? Are high-tech goods, such as a cellular phone, computer books and a phone answering machine, more popular purchases than novels, toys and record albums?

When you're buying a house in an unfamiliar area, the reports can be useful in narrowing your search. Running the reports prior to hitting the open houses can save you time because they can help you select one area over another.

"You should be looking for an overall impression. The reports are much like a little telescope into a neighborhood," says Blair A. Zucker, associate consultant with CACI. "They are meant to be fun, informative and insightful." The Neighborhood ZIP Reports can make what appears to be an overwhelming task—finding the right house—more manageable. The reports will never replace driving through neighborhoods looking for things important to you—tricycles in the yards, manicured lawns, quiet streets—but it will offer a broad, homogeneous look at a particular area. The more information you have, the better prepared you will be when you go house-hunting.

"When you buy a home, you want to find a neighborhood where you will be living among your peers. You want to find a place where people have similar incomes, occupations and home values. Some want a neighborhood with children, while others want to meet singles. These reports help you find the lifestyle you're looking for," explains Deborah A. Wilson, director of advanced marketing systems for CACI Inc. "If you have young children, for instance, you'll want to use the Civic/Public Activity Report to find a place where people vote and are active on the school board and PTA." This is exactly the sort of thing that is difficult to determine when you're just driving through a neighborhood.

A ZIP code is nothing more than a postal delivery area. The people who live in the same ZIP code do not necessarily have much in common. Incomes, ages and home values may differ vastly from one part of town to another. Because the Neighborhood ZIP Reports are based on averaging all of these facts and figures, the result is an overview. It is quite likely that within one ZIP code there will be homes valued at more than $1 million while just a few miles away, people are living in a subsidized housing complex. To get more detailed, specific information, you should consult SUPERSITE, which offers demographic information by various geographic selections, including a unit composed of any intersection in the United States as the centerpoint and the surrounding areas. Information on this and other detailed demographic products will appear next month in *Online Today*.

If you have questions about conducting a search, call CACI at 703/698-4646.

Cathryn Conroy is a contributing editor of Online Today. *Her CompuServe User ID number is 70007,417.*

1988 NEIGHBORHOOD DEMOGRAPHICS REPORT
ZIP CODE: 10553
WESTCHESTER COUNTY, N.Y.

	1980	1988
TOTAL POPULATION	10751	10344
TOTAL NUMBER OF HOUSEHOLDS	3616	3694
AVERAGE AGE	35.0	36.5
AVERAGE HOUSEHOLD INCOME	$ 20004	$ 32327

AGE GROUPS:	
0–4	7.9%
5–11	9.8%
12–16	7.0%
17–21	7.6%
22–29	13.4%
30–44	19.4%
45–54	11.5%
55–64	9.7%
65+	13.7%
	100.0%

OCCUPATION:	
EXECUTIVE	6.8%
PROFESSIONAL	10.4%
TECHNICAL	4.4%
SALES	6.0%
CLERICAL	22.1%
PRIVATE	4.8%
SERVICE	20.4%
FARMING	0.6%
CRAFT	10.3%
OPERATOR	10.9%
LABORER	3.2%
	100.0%

RACE:	
WHITE	17.0%
BLACK	80.7%
OTHER	2.2%
	100.0%

HOUSEHOLD INCOME:	
$ 0–14,999	27.4%
$15,000–24,999	18.9%
$25,000–34,999	13.6%
$35,000–49,999	19.0%
$50,000–74,999	15.5%
$75,000+	5.6%
	100.0%

TYPES OF HOUSEHOLDS:		
SINGLE PERSON		21.1%
MALE	7.4%	
FEMALE	13.7%	
FAMILY		75.3%
NON-FAMILY		3.6%
		100.0%

OCCUPIED HOUSING UNITS:	
OWNED	41.6%
RENTED	58.4%
	100.0%

AVERAGE HOME VALUE	$ 57,795
AVERAGE RENT	$ 300

OCCUPIED HOUSING BUILT IN:	
1975–1980	0.2%
1970–1974	2.2%
1960–1969	7.1%
1950–1959	7.3%
1940–1949	18.2%
PRE–1940	64.9%
	100.0%

1. Percentages for age, household income and race reflect 1988 updates. All other percentages are based on 1980 information.
2. 1980 income figures are expressed in 1979 dollars. 1988 income figures are expressed in 1987 dollars. Home value and rent are expressed in 1980 dollars.

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Roundup: Forum Newsletters Abound

by Cathryn Conroy

General information on most topics can be found in encyclopedias, almanacs or other reference books. But timely information on specific topics can take some digging. The best sources are usually newsletters, which are published with less lead time than magazines and journals, and can provide the latest time-critical information on specialized areas.

A number of newsletters are available in various forums on CompuServe. Many give an inside look at investing; others offer expert information for a professional edge in business. Some newsletters help you discover how best to use your computer and favorite software. A few help you become more socially active, while still others keep you informed about your favorite hobbies.

Inside Investing

Although you won't find hot stock tips in the newsletters published in the Investors' Forum, you will find a number of investing strategies and techniques that might lead you to a potential stock buy.

Richard Peterson

Steve Hovland

Market Muse, written and published weekly by Steve Hovland, offers investment information and features articles and charts, including advance/decline and new highs/new lows. No subscription fees. Investors' Forum. Latest editions in Library 10; back issues in Library 8.

The Chart Readers' Investment Report, edited by Howard W. Kays, is a delayed upload of a paid subscription newsletter (subscribers of the print edition get their mailed copies first). Features articles on the economy, inflation, interest rates, and the stock market, with analysis as to what the fluctuations mean. No subscription fees. Investors' Forum. Latest edition in Library 10; back issues in Library 8.

Weekly Trade Outlook offers a look at trading futures with information on corn, soybeans, coffee, cocoa, cotton and sugar. Edited by Raymond J. Kaider, the newsletter takes the viewpoint that trading futures is an art, not a science. No subscription fees. Investors' Forum. Latest editions in Library 10; back issues in Library 8.

The Professional Edge

Public Relations Reports: Computer/ Hi-Tech Alert, edited by Michael Naver and published by Communication Research Associates, is a monthly publication that contributes to the growing awareness among communicators of the benefits of computer applications in their work. This electronic edition contains highlights of a print subscription version ($98 annually). Readers are encouraged to contribute case study material of their innovative use of personal computers. No subscription fees. Public Relations and Marketing Forum, Library 9.

Another newsletter available through the Public Relations and Marketing Forum, *Easy Does It*, reports hot news from the message board and library sections of the forum every two months. You can receive it by US Mail or via EasyPlex or MCI Mail at no charge. Just leave a message with Ron Solberg, forum administrator (76703,575), providing your address, phone number and appropriate online User ID numbers. Those requesting the subscription from abroad will be asked to pay $5 for handling.

Family Home-Office Computing is a magazine with selected articles published in the Working From Home Forum. Recent topics have included word processing business successes, and why Philippe Kahn, the president of Borland International, has a home office. No subscription fees. Working From Home Forum, Library 10.

The *Association of Electronic Cottagers Report*, edited by Lis Fleming, is the official monthly newsletter of the Association of Electronic Cottagers. Feature articles in recent issues have included the use of high-technology office equipment such as fax machines, home office success stories and local support networks. No subscription fees. Working From Home Forum, Library 15.

Information & Research Brokers of New England, edited by Stephen M. Babbitt, conveys the notion that information can have value when a systematic method of collecting data is developed. The newsletter shares organizational techniques and resources that can be used by almost any business. No subscription fees. Working From Home Forum, Library 4.

LINC Notes, a newsletter for educators, publishers and product developers, covers new products and market trends in educational media and materials. The electronic edition in the Education Forum is excerpted from the printed version and contains the latest education resource information. Participation from parents, educators, publishers and developers is encouraged by editor Carol Bianchini Daniels. No subscription fees. Education Forum, Library 5.

The Journalism Forum's *Job Information Bank* is a newsletter distributed weekly in print and electronic versions to members of the National Press Photographers Association. Edited by Steve Sweitzer, the newsletter contains lists of confirmed job openings for news photographers and editors. Although there are no subscription fees for the newsletter, access is limited to members of NPPA (annual dues $55). Journalism Forum.

Expert Computing

Apples OnLine is the MAUG User Group Newsletter. Updated every other month by editor and publisher Neil Shapiro, the newsletter offers readers a chance to voice suggestions and concerns in "The Members Say..." as well as help files and tips on using Apple computers. No subscription fees. (GO ADL-4)

Selected articles and source code from *TechNotes*, published by Ashton-Tate Support Services and edited by Richard Bunter, are posted in the Ashton-Tate Forum on such topics as Framework, dBase, graphics programs such as Draw, Applause and Master Graphics series, MultiMate word processor and Byline desktop publisher. There are no subscription fees for electronic articles, but the print edition is $40 annually. Articles are filed by topic in the appropriate libraries.

Boasting more than 35,000 subscribers to the print edition, the *WordPerfectionist* focuses on WordPerfect 5.0 topics such as graphics, word and character spacing, tutorials on using the Style feature and reports on problem fixes as well as enhancements made to the program. Edited and published by Richard Wilkes, the newsletter is posted in the WordPerfect Support Group Forum in a closed library open only to *WordPerfectionist* subscribers. Call 800/USA-Group to subscribe ($36 or $48 annually). WordPerfect Support Group Forum.

ZMagazine, published and edited by Ron Kovacs, offers up-to-date news, reviews and product information for the Atari 8-bit line of computers. No subscription fees. Atari 8-Bit Forum, Library 11.

In addition, Kovacs publishes a special version for ST users called *STZ Magazine*. Articles include product reviews, news from the ST community as well as reprints of messages and conference transcripts from major computer networks. Atari Arts Forum, Library 15.

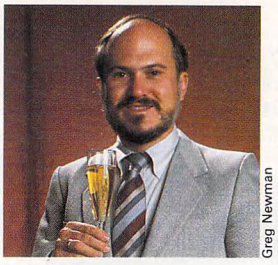
Users of the Atari ST also will benefit from *ST Report*, published and edited by Ralph F. Mariano, with its news, reviews, product information and industry commentary on the Atari ST computer. Atari Arts Forum, Library 11.

The most popular articles from *Michigan Atari Magazine*, a monthly print publication from eight Michigan Atari user groups, are posted online. These include product reviews, news items as well as advertiser support information. Atari Arts Forum, Library 15.

Special Newsletters

Selected articles from *The Catalyst*, a newsletter devoted to the interests of the disabled, are edited by Jim Spelman. Articles appear in menu form in their own database and include such topics as the feasibility of voice input/output, new software, publications and products, reviews of computers, special education updates and more. No subscription fees. (GO HUD-145)

The Disability Rag, published by Advocado Press, is also stored in its own database. Articles contain news and features on such topics as farm aid, AIDS, blindness and deafness. Many of the pieces are written in first-person, offering a unique perspective on complex problems that the non-disabled may not fully understand. No subscription fees. (GO HUD-973)



Greg Newman

Jim Kronman

Florida Child Advocate, edited by Ronnie B. Londner and published by Careco Inc., is a statewide printed newsletter dedicated to advocacy on behalf of Florida's children and the prevention of child abuse and neglect. Its major goal is to encourage networking and cooperation among child advocates, criminal justice and law enforcement officials, educators and health officials. No subscription fees. National Issues/People Forum, Library 9.

Lifestyle News

For the best information on wine, consult *The Wine Investor/Buyer's Guide*. Edited by Jim Kronman, an expert wine connoisseur, the guide is a professional publication aimed at serious consumers and those in the wine trade. A printed edition also is available ($60 annually). Bacchus Wine Forum, Library 1.

For those fascinated by tropical fish, check out the *Highlights from the ATF Forum*, a compilation of edited threads from the message board of the Aquaria and Tropical Fish Forum. Edited by Dave Hendrickson, *Highlights* is also available in a printed edition. Aquaria and Tropical Fish Forum, Library 8.

Excerpts from *Action Line*, published by Trout Unlimited, periodically appear in the Outdoor Forum. The newsletter focuses on protecting trout. Recent articles include dealing with hydrodam problems, Montana's drought problems and restoring cutthroat trout in Montana's Swan River. No subscription fees. Outdoor Forum, Library 5.

Cathryn Conroy is a contributing editor of Online Today. *Her CompuServe User ID number is 70007,417.*

How to Find Newsletters Online

Newsletter Name	Forum	Library	GO Command
Action Line	Outdoor Forum	Library 5	GO OUTDOORFORUM
Apples OnLine	MAUG Forums		GO AOL-4
The Catalyst	Handicapped Users' Database		GO HUD-145
The Chart Readers' Investment Report	Investors' Forum	Libraries 10, 8	GO INVFORUM
The Disability Rag	Handicapped Users' Database		GO HUD-973
Association of Electronic Cottagers Report	Working From Home Forum	Library 15	GO WORK
Family Home-Office Computing	Working From Home Forum	Library 10	GO WORK
Florida Child Advocate	National Issues/ People Forum	Library 9	GO ISSUES
Highlights from the ATF Forum	Aquaria and Tropical Fish Forum	Library 8	GO FISHNET
Public Relations Reports: Computer/Hi-Tech Alert	Public Relations and Marketing Forum	Library 9	GO PRSIG
Information & Research Brokers of New England	Working From Home Forum	Library 4	GO WORK
Job Information Bank	Journalism Forum	Library 15	GO JFORUM
LINC Notes	Education Forum	Library 5	GO EDFORUM
Market Muse	Investors' Forum	Libraries 10, 8	GO INVFORUM
ST Report	Atari Arts Forum	Library 11	GO ATARIARTS
TechNotes	Ashton-Tate Forum	Various libraries	GO ASHFORUM
Weekly Trade Outlook	Investors' Forum	Libraries 10, 8	GO INVFORUM
The Wine Investor/Buyer's Guide	Bacchus Wine Forum	Library 1	GO WINEFORUM
WordPerfectionist	WordPerfect Support Group Forum	Library 11	GO WPSG
ZMagazine	Atari 8-Bit Forum	Library 11	GO ATARI8

YOU'RE SPENDING HOURS FINDING FACTS

AUTOSIG Enhanced

Ready to Download from IBM Communications Forum

by Paul Newkirk

A new version of AUTOSIG, a communications program for accessing CompuServe with IBM PCs, is now available online and brimming with new capabilities.

AUTOSIG automates access to CompuServe and specifically the forum message boards and EasyPlex. It allows you to read your EasyPlex messages or favorite forum bulletin boards and compose replies offline at your leisure. AUTOSIG logs on to CompuServe for you, selects the messages of interest, downloads them and logs off. After you have replied to messages using AUTOSIG's text editor, it will then go online again and upload your messages or replies to their appropriate places. "AUTOSIG gets the most out of the IBM PC and CompuServe," says Don Watkins, IBM forum administrator.

"Perhaps the most important enhancement is that it uses the new forum software," he says. While AUTOSIG can handle the old and the new forum software, with the added support for the new forum software, Watkins "highly recommends" using it.

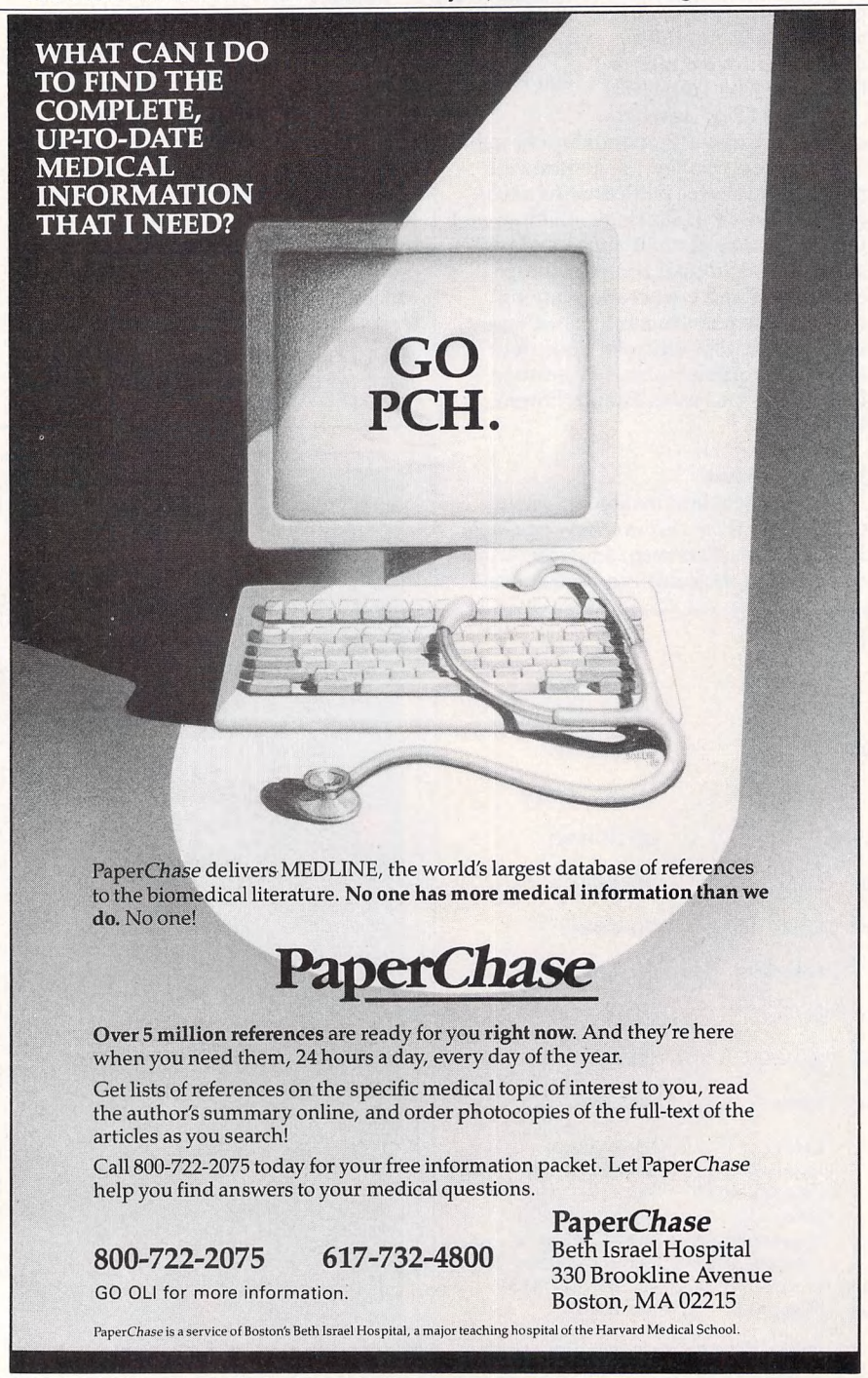
Another enhancement is the explicit and automatic splitting of long messages into two or more messages. Continued messages end with the tag [continued] and resume in the next message with [more]. Also, while uploading your replies, AUTOSIG will automatically split messages that are too long and turn the later parts of the message into replies to the first part.

A new command mode and an ability to scroll messages line by line "are popular with the program's users," according to Watkins. The new command mode "is a combination of pure command mode and menu mode." Menus are suppressed to make displays less cluttered with the result that AUTOSIG's terminal mode is simpler to use. The new scrolling feature "allows people to scroll their messages line by line like most word processing programs. Before, you displayed one page at a time; to move around, you had to bounce back and forth between pages. Now you can easily scroll through your messages," Watkins says.

Other enhancements include an increased number of online help screens, the ability to see message headers differently and thus fit more information on one screen, and support for eight COM port addresses.

The enhanced version of AUTOSIG is in Library 1 of the IBM Communications Forum (GO IBMCOM). AUTOSIG and its 95-page manual are free for downloading with several other AUTOSIG goodies such as helpful scripts. Support is as close as a message posted on the IBMCOM Forum bulletin board.

With these enhancements, AUTOSIG celebrates its fifth birthday and sixth release. The first script-automated navigation program for accessing CompuServe offline with IBM PCs continues to grow. As Watkins claims, "There's nothing it can't do."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Forum Keeps Track of SPC Advances

by Michael Houdeshell

In less than a decade, Software Publishing Corp. has come a long way. Having emerged from one of those fabled pre-personal computer California garages, the company soon hooked the early Apple II series no-nonsense audience on the PFS: (Personal Filing System) programs. Later, it turned to the industrial-strength DOS machines as the IBM-compatibles gained ascendancy. Most recently, it acquired the rights to the prestigious Harvard Graphics program. And now the SPC Forum reflects these achievements.

Richard Yates, primary administrator for the forum (GO SPCFOR), acknowledges previous deficits. "The forum, which has been around since 1985, originally had only one SPC person working on it at any one time." Such scant support is hardly the case today: a full-time team, in which each member represents a different product line, works with Yates to relay users' questions and problems to the appropriate technical support group.

SPC now boasts three separate product lines. First Choice, a catch-all application for busy IBM PC users, epitomizes the original SPC philosophy that programs should be easy to learn and use. First Publisher and First Graphics, which are skeletal desktop publishing and graphics applications for the occasional user, round out the line. The old PFS: line has been supplanted by the Professional Write, File and Plan programs, which offer beefed-up capabilities and product continuity with their PFS: predecessors. Finally, there are the top-shelf Harvard Graphics and Project Manager applications, which are considered touchstone products in the industry.

The Software Publishing Forum, according to Yates, attempts to track these changes. "Parts of the forum that involve descriptions and information regarding specific products and accessory packages have been totally revamped in that the old products have been done away with; the only information you'll see about products now is the current information on whatever release is presently available," he says. "Additionally, we've added accessories menus so that people can look at the various accessory packages that go along with our main product lines. Along with that, there is pricing information. And, we still maintain the question-and-answer section of the forum. Because we now have a group of individuals working on answering questions, most can be addressed within 24 hours," Yates adds.

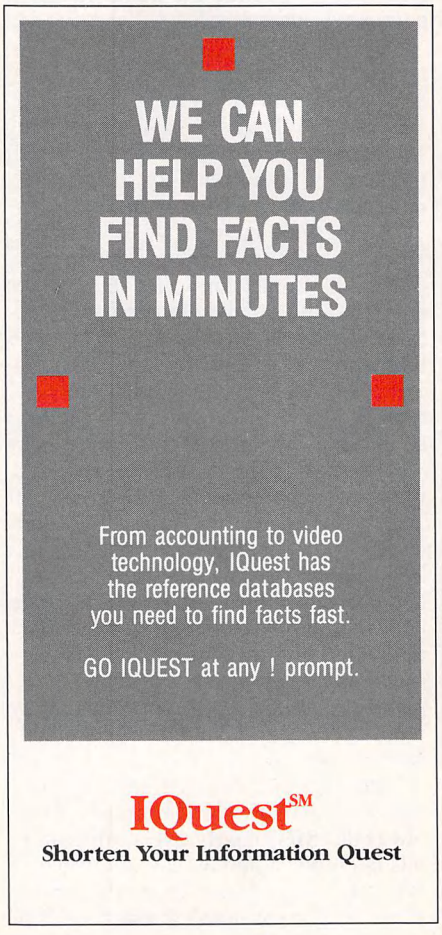
Such prompt and authoritative treatment, indeed, is reserved for all types of questions, from the most trivial greenhorn petitions for help to the "Big Corporate systems integration" variety. "We have quite a variety of users on the forum," says Yates. "We get a lot of questions about the Harvard product line, especially Harvard Graphics. People want to know how to integrate Harvard Graphics into desktop publishing programs such as Ventura or PageMaker. Or they ask, 'How can I create a metafile and import that into Harvard Graphics and use that as an image within the graphics program?'

"Professional Write, on the other hand, is a popular word processing package, so a lot of our users are wondering how can they take a Professional Write document and integrate it into either a desktop publishing program or a page layout program. With Professional Write, we also get simple applications questions: How can I make text bold or underlined? How can I print to non-supported devices? People are wondering how they can integrate their documents and graphics into First Publisher. PFS: First Choice has multiple types of applications in one package: it has its own word processing, database, spreadsheets and graphics. It does telecommunications as well—it does so many things that the questions being asked of us about that program vary greatly from user to user."

The big attraction for many users, however, might turn out to be the libraries and their promise of free software. "One of the ways we're working to upgrade the forum today is by updating the libraries to include all of the latest trial-size disks and general applications programs that work with our various product lines. In each of the program libraries are files specific to that program. For example, in the First Publisher library, you can find numerous fonts, graphics and graphics conversion utilities. Because the files are archived, they can be quickly downloaded and unpacked with an archive utility," Yates says.

The mystified, trial-size disks are "basically just scaled-down versions of each program SPC sells. People will be able to download these files and unarchive them, allowing them to sample a product before they purchase it from their local retail outlet." This should be welcome news to most consumers, who otherwise have to rely on slick ads that gloss over problems—who would, in fact, probably prefer to try out a prospective software purchase without an officious salesperson hovering anxiously in the background as if the product were Waterford-fragile and might—oops!—crash and break. With trial applications available from online libraries, SPC continues and expands upon Harvard's well-known practice of encouraging users to give products rough treatment on their own computers before pulling out the plastic.

Michael Houdeshell is a free-lance writer based in Columbus, Ohio.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Zenith Forum Welcomes Expert, Novice Users

by Fred Terry

The obvious place for anyone interested in computers from Zenith Data Systems is the Zenith Users' Forum on CompuServe. Members know everything there is to know from the old Heathkits to the newest Zenith laptop computers and super-fast IBM-compatible desktop computers.

Although the Zenith Users' Forum is one of the newest on CompuServe, it has its roots in one of the oldest—the Heath Users' Forum. The Heath Users' Forum was originally an electronic meeting place for the Heath Users' Group—known as "HUG SIG"—a division of Heath that had been online since the beginnings of CompuServe.

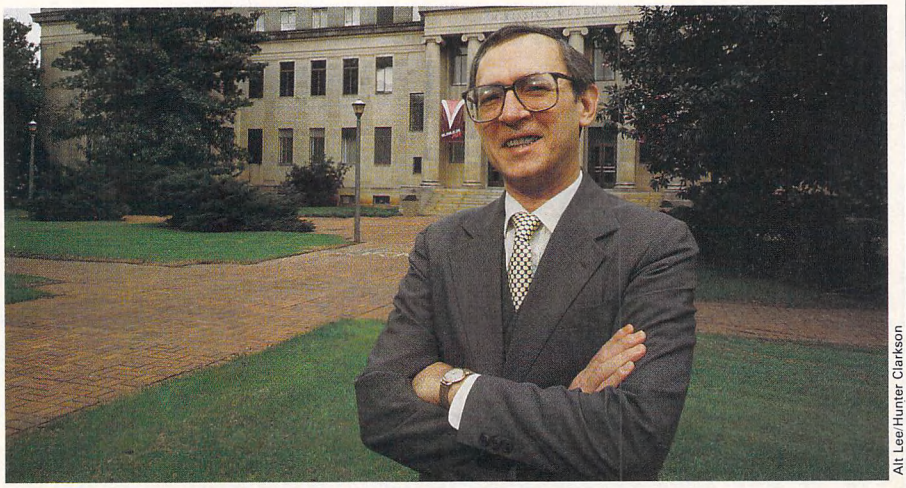
Last November, CompuServe invited Dr. Joseph Katz to develop an independent public forum that would serve CompuServe subscribers interested in Zenith or Heath computers. Katz accepted the challenge and almost immediately opened the doors to a completely new service.

The addition of the Zenith line makes the forum home to one of the largest personal computing groups, as Zenith Data Systems is one of the top 10 computer manufacturers in the country, and the Zenith laptops are ranked numbers 1 and 2 in the nation.

A long-time member of the forum, Katz keeps track of the goings-on of the forum in addition to teaching American literature at the University of South Carolina. He also writes a column and articles for *REMark*, the official publication of the Heath Users' Group, as well as a column for *Sextant*, an independent journal for Zenith owners.

Katz wants the forum "to be an international community of support for Zenith owners. I think that the forum can be the place for every user of a Zenith computer around the world to get help and information, and to participate in a large community of people interested in the Zenith line." The forum is indeed international, with members accessing from Canada, Italy, Norway, Switzerland and England as well as from all over the United States.

Although the Zenith Users' Forum inherited the software libraries of the old HUG SIG, nearly everything in it has been discarded as past its prime. With the aid of forum member Tom Putnam, Katz weeded through several years of files. Then, with the advice of forum members, he and Putnam reorganized the libraries so members could get "the best there is" for users of Zenith and Heath computers.



Alt Lee/Hunter Clarkson

Wants "an international community of support": *Katz*

A distinctive feature of the Zenith Users' Forum libraries is a steady flow of support files directly from Zenith Data Systems. Those files include technical information, fixes and patches.

Library 2 is devoted to the Zenith Direct files. Among its most often downloaded items is HOTCUR.ARC, a program that increases cursor visibility on Zenith's laptop computers.

Nor are Zenith's desktop computers ignored. "One of the best things about Zenith's laptops is that they're compatible with its desktop computers," says Katz. "So when the forum supports one kind of Zenith computer it is usually supporting the other kinds, too."

Besides the programs and information in its Zenith Direct library, the forum offers support for Zenith's mainstream computers in Libraries 3 (DOS Utilities) and 4 (DOS Applications). Katz and his staff select what they know will work best on Zenith computers. They produce programs in a series called "Zenith Users' Forum Utilities," available for downloading only from the forum.

"Because some Zenith owners have a strong technical background, we have information about building and modifying the hardware. Library 7 is devoted to kits and hardware, from the ancient Heath products to the latest Zenith equipment." And since the Zenith Users' Forum opened its doors last November, not a day has passed without new files being uploaded to Library 0, where they stay for about a month before being distributed to their appropriate home libraries.

Since his duties began, Katz has spent a good portion of his time adding new Zenith members to the forum. He is particularly pleased that several new members have become very active in the forum. "A couple of the guys had never used the conferencing feature on CompuServe," says Katz, "but now they are regular attendees at the Saturday conferences."

Read the messages and you'll find that most requests for help receive immediate response, usually from several members who know the answers. It's not unusual for one member to place a long-distance call for information needed by another.

Many members are Heath users who built their computers, and some members have built two or more computers. Dale Wilson, the forum's assistant administrator, is available to answer technical questions. He has received factory training from companies including Zenith and Novell. Some Zenith representatives regularly log on to the forum to answer technical questions and clarify details.

As Ron Rowe of Valley Forge, Pa., told a new member recently, "There are a lot of experts here in a lot of areas, and then there are novices like me, but the one thing that seems to make this forum special is the incredible help that everyone is willing to give. It is so refreshing, after years of trying to get answers to some basic questions, to find a place you can rely on, to say nothing of the things you pick up that you can build on."

Fred Terry is a free-lance writer and computer consultant who lives in Lawrence, Kan. His CompuServe User ID is 73057,466.

Handicaps Vanish Online

Members Communicate, Unfettered by Physical Limitations

by Yvonne Heather Burry

To a blind person or someone in a wheelchair, a bumpy sidewalk can be a challenge. For those who are severely hearing impaired, a symphony may be an unfulfilling experience. But online, no one knows if the friends they make are young or old, live near or far away, or are handicapped—unless they choose to explore those topics.

"When a handicapped person communicates through CompuServe, there is no handicap," says David Manning, forum administrator in the Disabilities Forum (GO DISABILITIES). "The quality of a person's idea is what's important, not how tall you are or whether you can walk."

Georgia Griffith, an information provider of the Handicapped Users' Database (GO HUD) and primary forum administrator of the IBM/Special Needs Forum (GO IBMSPE), jokes about "blowing her cover" when someone finds out that she has been blind since birth and deaf for nearly two decades. She responds so quickly on her VersaBraille terminal that anyone conversing with her online would have nary a clue that she uses a Braille reader instead of a standard terminal and keyboard.

What CompuServe offers the handicapped is networking, friendship, sharing of information and—if wanted—anonymity. While many handicapped users function within the system and take advantage of its minimal-barrier environment, others identify themselves when asking for specific information or making acquaintances online.

Sis (her "handle") was a polio victim in the 1950s, but maintains her independence—in spite of her wheelchair—by driving her car, playing the piano, doing volunteer work and serving as a staff member in the Consumer Health Forum (GO GOODHEALTH). "I have shopped the Mall, played some of the games, been on CB (and made some friends there) and used the encyclopedia, IQuest and other reference areas," she says. For Sis, online maneuvering simply saves her a lot of energy.

For Chris Gray, totally blind since birth, the "wealth of information" available on CompuServe is an asset. "Did I tell you I did almost all of my Christmas shopping in The Mall (GO MALL) and Comp-u-store OnLine (GO CUS)?" he responded. "Comp-u-store is great because so often I don't know even the types of things available in a particular shopping category. It's like browsing store shelves—and I don't need sighted assistance to do this."

Greg Miller

VersaBraille virtuoso: *Griffith*

Several years ago, James Leipski was in a car accident that left him with limited use of his hands and confined to a wheelchair. "Because of the bad winters in Wisconsin, I had to depend on other people to do my gift shopping," he says. "This year I did a lot of shopping online."

But Leipski's most powerful use of CompuServe has been related to his interest in paralyzed veterans' rights. "I get information on government agencies and answers to my questions," he says. "And I can send letters to senators and Congressional representatives directly through CompuServe."

Send letters he does. Proud of the role he played in winning a 13-year struggle to get the Veterans Administration to a cabinet level appointment, he has also been vocal in opposing the Federal Communications Commission's intention to levy a surcharge on the use of telephone lines for computer system access. "The letters I've written have made a difference," he says. CONGRESSgrams from Leipski and thousands of other CompuServe subscribers contributed to the defeat of the FCC proposal in April 1988.

Leipski says he is eager to discuss his handicap. "People don't realize what it's about unless you tell them. They may be afraid to ask." Presently active in the National Paralyzed Veterans Association, Leipski continues to search the CompuServe membership to locate people he knew from his days of military service.

Manning, who directs a project at The Clarke School for the Deaf in Massachusetts, sees young deaf people attempt to lead "normal" lives with varied results.

Just ask "Metal*Man," who was mistakenly arrested for drunkenness due to his hearing impairment and balance problems. But his handicap did not hamper him in the CB Simulator (GO CB). An online friendship with "Topaz" led to the discovery of many mutual interests, a solid friendship and finally, romance. Now the infamous

(continued on pg. 29)

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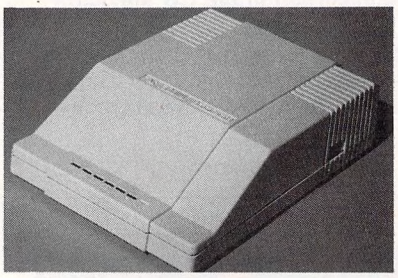

GENERAL

The Midget 2400* is a 300/1200/2400bps, auto dial, auto answer modem which can operate at half or full duplex over the switched dial-up network or on a 2 wire leased line. At 2400 bps it is async, CCITT V.22bis compatible. At 1200 bps it is async, CCITT V.22 or Bell 212A compatible. Finally, at 300 bps async it is CCITT or Bell compatible.

DIALING

The modem is fully compatible with the "AT" command and register set at all speeds and uses the "AT" 2400 commands for asynchronous operation making the Midget 2400* compatible with virtually all IBM* PC communications software. An internal speaker with software selectable volume is included.

PERFORMANCE

The Midget 2400* automatically adjusts itself to match the terminal's (or computer's) baud rate, parity, and stop bits. The default setting is CCITT 2400 bps but all parameters can be changed in the modem's non-volatile memory by using the extended "AT" command set.

DIAGNOSTIC CAPABILITY

7 status LED's are provided: AA (Auto Answer), RI (Ring Indicator), OH (Off Hook), CD (Carrier Detect), TD (Transmit Data), RD (Receiver Data), DTR (Data Terminal Ready). Switches are provided to control. SW1 (Dumb Mode), SW2 (DTR Control), SW3 (CD Control). The modem runs through a self test when powered on and incorporates analog and digital loopback.

OPERATION:	Full duplex async.
DATA RATES:	Asynchronous 2400, 1200, or 300bps.
MODULATION:	FSK, PSK, and QAM.
CHARACTER FORMAT (ASYNC):	8, 9, or 10 bits including start and stop bits.
TRANSMITTER OUTPUT LEVEL:	Permissive: – 10 dBm +/– 1 dBm
RECEIVER SENSITIVITY:	On: – 43 dBm Off: – 48 dBm Hysteresis: 2dBm minimum
EQUALIZATION:	Automatic adaptive.
DIAGNOSTICS:	Self test analog and digital loopback.
DIGITAL INTERFACE:	E1A RS232C
VF INTERFACE:	7' cable with RJ-11 jack.
SIZE:	6½" x 4½" x 1¾" (L x W x H)
POWER:	100-130 VAC

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- On-board speaker
- Remote and local diagnostics
- Call progress monitoring
- Works with virtually all popular software programs
- Digital signal procesing for clear error free transmission
- Fully "AT" compatible
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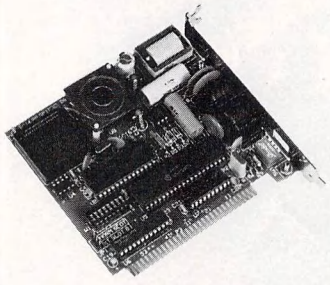

GENERAL

The Incomm Midget PC 2400® is a 4½" board modem designed to fit in any slot of IBM PC/XT/AT and 386 computers. It operates at 300, 1200 and 2400 bps asynchronously and is auto dial, auto answer. At 2400 bps it is CCITT V.22 A/B, V.22bis and Bell 212A compatible. At 300 bps it is Bell 103 compatible. Call progress is monitored on the screen as well as by a built in speaker. It can operate with most communication software packages such as Crosstalk XVI, etc.

DIALING

Dial protocol on the Midget PC 2400® is FULLY "AT" compatible including 27 "S" registers and a speaker. A second RJ-11 jack permits connection of a telephone set through which calls can be manually dialed. The telephone can be used for voice communication when the modem isn't in use.

PERFORMANCE

The Midget PC 2400* incorporates high speed digital signal processing that allows clear, error free transmission regardless of phone line connection.

DIAGNOSTICS

The modem can perform local analog and digital loopback tests, plus remote digital loopback tests. It incorporates a self test pattern generator, plus integral detector with counter which can be used with the loopback tests.

Data Rates:	2400, 1200 and 300 bps
Modulation:	QAM in 2400 bps operation, and 1200 bps, FSK in 300 bps operation
Character Length:	10 bits
Digital Interface:	IBM PC/XT/AT Bus & 386 computers (COM1/COM2/COM3/COM4)
Vf Interface:	USOC-RJ11C Modular Phone Jack
Transmit Level:	– 10.5 +/– 1.5 dBm
Bit Error Rate:	Less than 10 ppm @S/N 12 dB
Automatic Disconnect:	30 Sec (Register S7 Default)
Loss of Carrier Disconnect:	1.4 Sec (Register S10 Default)
Compatibility:	V.22 bis, V.22 A/B and Bell 212A/103
Equalization:	Transmitter: Fixed Compromise Receiver: Automatic Adaptive
Carrier Detect ON to OFF Level:	– 48 dBm
Carrier Detect OFF to ON Level:	– 45 dBm
Delay OFF to ON:	60 ms + 5 ms
Delay ON to OFF:	155 ms + 50 ms
Size:	4.2" x 4.5"

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CONTROL COMMANDS

Control Command	Code	Function
ESCAPE	+ + +	During asynchronous connection, return modem to command state during a connection (without hanging up). (To change a baud rate, for example).
GO ON LINE	0	Return to on-line state after a + + + command.
ANSWER	A	Send answer tone and try to connect with modem calling in.
HANG UP	H	Hang up phone (go on hook).
ECHO	E	E or E0 = select no echo (normal for full duplex transmission). E1 = echo commands to screen.
SPEAKER	M	0 = no speaker 1 = speaker ON during dialing 2 = speaker always ON
SPEAKER VOLUME	L	0 or 1 = low volume 2 or 3 = high volume
PRODUCT CODE	I	0 = product code revision level 1 = checksum of ROM 2 = checksum OK
RESET MODEM	Z	Soft reset — almost like turning modem OFF and ON.
BELL/CCITT	B	0 = use CCITT signals 1 = use Bell signals

REGISTER/VIEW CHANGE COMMANDS

Register	Function
S0	Allows number of rings before AUTO ANSWER. (S0 = 0 is NOT auto answer)
S1	Counts number of rings
S2	Escape Code character.
S3	ASCII character for carriage return.
S4	ASCII character for line feed.
S5	ASCII character for backspace.
S6	Number of seconds to wait for dialtone.
S7	Number of seconds to wait for carrier.
S8	Duration of pause (,) in seconds.
S9	Carrier Detect duration before connect, in 1/10 seconds.
S10	Loss of carrier duration before hanging up, in 1/10 seconds.
S11	Not Used
S12	Escape code guard time in 50th seconds.
S13	Bit mapped options
S14	Bit mapped options
S15	Flag register.
S16	Modem Test Option
S17	Not Used.
S18	Test Timer, in seconds.
S19	Not Used.
S20	Not Used.
S21	Bit mapped options register.
S22	Bit mapped options register.
S23	Bit mapped options register.
S24	Not Used.
S25	Delay to DTR, in seconds.
S26	RTS to CTS delay, in 100th sec.
S27	Bit mapped options register.

DIAGNOSTIC COMMANDS

Code	Function
&T	Terminate test in progress.
&T1	Initiate local analog loopback.
&T3	Initiate digital loopback.
&T4	Grant request for remote digital loopback.
&T5	Deny request for remote digital loopback.
&T6	Initiate remote digital loopback.
&T7	Initiate remote digital loopback with self-test.
&T8	Initiate local analog loopback with self-test.

EXTENDED COMMANDS

Extended Command	Code	Function
DCD CONTROL	&C	0 = Carrier detect signal is always ON 1 = Carrier detect signal is ON while the modem is connected and ready to transfer data.
DTR CONTROL	&D	0 = modem ignores DTR 1 = ON to OFF of DTR puts modem in command state 2 = ON to OFF DTR modem hangs up goes to command mode 3 = ON to OFF of DTR resets modem
GUARD TONE	&G	0 = no guard tone 1 = 550 Hz Guard Tone 2 = 1800 Hz Guard Tone (Not used in USA)
LEASED	&L	0 = standard phone line *PTSN 1 = leased line

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Metal*Man and Topaz are man and wife.

Online networking cannot replace human contact, but such modes as conferencing can make group situations easier for handicapped persons. Message threads within the Issues and Disabilities Forums show high levels of interest and participation. Larry Orloff, assistant forum administrator for the Disabilities Forum, says many forum visitors come in to compare notes and keep up to date with their particular interests, such as special adaptions to voice synthesizers for blind users.

Networking unites the handicapped with otherwise unavailable resource people who share ideas and encourage innovation. For example, Susan Crouch, who was left a quadriplegic after a bout with polio, says, "Years ago, I was on CompuServe, but could use it only with great difficulty." Crouch tapped the keys with a mouth stick and couldn't perform functions demanding two or more simultaneous keystrokes. Jerry, a friend she met on the CB Simulator, explored some solutions for her.

With his background in engineering and robotics and a lot of online encouragement, Jerry developed and Susan tested the "Magic Wand Keyboard." This 6- by 7-inch device holds a tiny IBM-style keyboard that requires virtually no pressure for a keystroke. Every function mimics the IBM keyboard. Another advantage is that two taps lock a key for simultaneous keystroke functions.

As the invention evolved, Susan and Jerry started a cottage industry, In Touch Systems, to custom-build (and test) these keyboards for people with such challenges as limited arm or head movement.

But technology also can be a limiting factor as it advances in relation to computers. Griffith worries that more emphasis on graphics will leave behind those dependent on Braille output with no use for CRT images. "I have a program that converts pictures from Lotus 1-2-3 or some other programs to Braille graphics," says Griffith. "But it won't work on a PS/2."

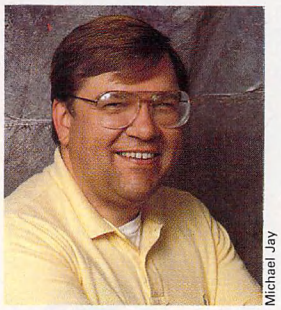
Yet "a network such as CompuServe may be a handicapped person's only chance to compete with the non-handicapped on his or her own terms," says Griffith. And that option alone may be a significant vehicle to smooth an otherwise bumpy path.

Yvonne Heather Burry is a free-lance writer in Columbus, Ohio. Her CompuServe User ID number is 76703,3057.

Scanner Fans Listen In, Share News on HamNet

by Daniel Janal

Some people like to get the news about the space shuttle from their TV sets on the evening news. Others like to experience the news as it happens. Those people use scanners to listen in on the conversations between astronauts and mission control. They also compare notes on CompuServe's HamNet Forum (GO HAMNET).



Michael Jay

Scott Loftesness

Long a gathering place for ham radio operators, the forum recently expanded its offering to users of scanners, those radio-like devices that monitor everything from local police radios to the space shuttle. A section of the bulletin board is devoted to scanners, and one of the forum communications libraries is dedicated to the interests of scanner enthusiasts.

"Folks who listen to scanners enjoy hearing emergency services (police and fire), aircraft communications (plane to tower), and other such communications. By sharing their experiences, they can learn about interesting frequencies to listen to," says Forum Administrator Scott Loftesness. "Communications and scanning go hand in hand.

"A surprising number of people enjoy listening to scanners. Because many of them are also amateur radio operators, HamNet was the obvious location for such an interest area," he says. "The scanner section rapidly became one of the most popular sections on HamNet, with several thousand enthusiasts logging in."

While scanners are most often used to monitor routine services, many people are discovering the more exotic use of monitoring communications from the space shuttle.

"Many of the scanners commercially available are capable of monitoring the communications between the shuttle and ground control," Loftesness says. "During a recent shuttle flight, forum members shared information about the frequencies they heard the shuttle using, the times and other particulars."

You don't need a lot of expensive equipment to listen to the shuttle with a scanner. "Scanners are available in a variety of price ranges beginning at about $100 to nearly $1,000, depending on coverage and features," he says. "Many of the members in HamNet, however, use basic scanners available from Radio Shack and similar stores."

Novices can learn a great deal about scanners and how to get the most out of them by reading the dozens of articles available in Library 2 of HamNet. Library topics include:

- Descriptions of scanner frequencies for such diverse places as Virginia, West Coast Railroads and Disneyland.
- How-to articles to improve the battery consumption and reduce the "squelch" (noise).
- Several dozen frequencies used in support of space shuttle missions.

"Using a scanner, it's possible to listen in on a wide variety of communications of interest in your local community," Loftesness says.

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Welcome to the State of Hassle-free Travel

by Lindsy Van Gelder

Once upon a time, it was No Big Deal. You called your travel agent, you told him or her where you wanted to go and when, and then you got your tickets. There were some seasonal variations in fares and a few fare options for those who could purchase their tickets in advance, but the general rules were so uncomplicated that most travel agents could keep track of them in their heads.

Not anymore. Deregulation of the airline industry has turned the fare structure into a tangled web that only a computer can track. There are as many as 100 types of fare categories for certain routes, based on such factors as whether you're willing to fly at off-peak times, stay over on a Saturday night, change planes, pay in advance or pay a penalty for cancellation—plus various combinations of these and other factors.

All of these fares, moreover, may change at any time as airlines monitor what the competition is doing and re-evaluate customer demand—which means that if you were told there were no discount seats available when you called last week, you might have better luck today. According to James Fite of American Airlines, an astounding 17.5 million fare changes may be made worldwide every week.

"A travel agent

would have to have the patience of a saint to walk you through this stuff," says New York journalist and CompuServe subscriber Robert Roth (see accompanying story). "The more flexible your schedule is, the more fishing around you can do to get a bargain, and it's just not cost-effective for the travel agent to help you do that. Which is why I do it myself, online."

So do plenty of other users. CompuServe subscribers have a choice of three full-featured airline services. Travelshopper (GO PARS) includes information on fares and schedules worldwide, hotels, car rentals, currency conversion, mileage, and TWA and Northwest flight information (including movies and meals), plus special offers for frequent fliers on those carriers. American Airlines' Eaasy Sabre (GO SABRE) features weather, online frequent flyer information and offers for AAdvantage members, and a new "worldfare" feature that automatically prices up to a 24-segment international itinerary, as well as fares, schedules, and hotel and car rental information. The electronic edition of the Official Airline Guide (GO OAG), the database that has historically served as the industry bible, features frequent flyer information, country and travelers' information and *Travel News*, an online newsletter. All three services permit you to make reservations from your computer keyboard.

Subscribers use the airline booking services (and other CompuServe travel databases, such as the ABC Worldwide Hotel Guide, Visa Advisors, and the State Department Advisory Service) for a variety of reasons. Hearing-impaired users may find online booking especially convenient, as do those who discover that the time they have free to do travel planning is at night, when travel agencies are closed. And some users, notes travel agent Susan Waldron, "just like to do it themselves no matter what." But what they all have in common is the desire to take control of their itineraries.

New York systems analyst Michael Gat works for an international financial services company that has its own travel agent. "For business, all my tickets have to be booked through the company," he says, "but occasionally I get to mix business with pleasure, and it works out much better for me if I can go to the travel department and say exactly what flight I want, as opposed to letting them decide."

For example, Gat prefers to fly transatlantic at night, sleep on the plane, and have the next day free in Europe—at no extra cost to his company.

"The more complicated the itinerary, the more it matters what time you leave one place and what time you arrive at another," Gat adds. He also finds that the more he travels, the more he gets "set in my ways" about service and reliability. "There are certain airports, such as Denver and Chicago, where the connections tend to be a mess." He uses Eaasy Sabre (which lets users specify a preferred hub) to help him find alternative routes whenever possible.

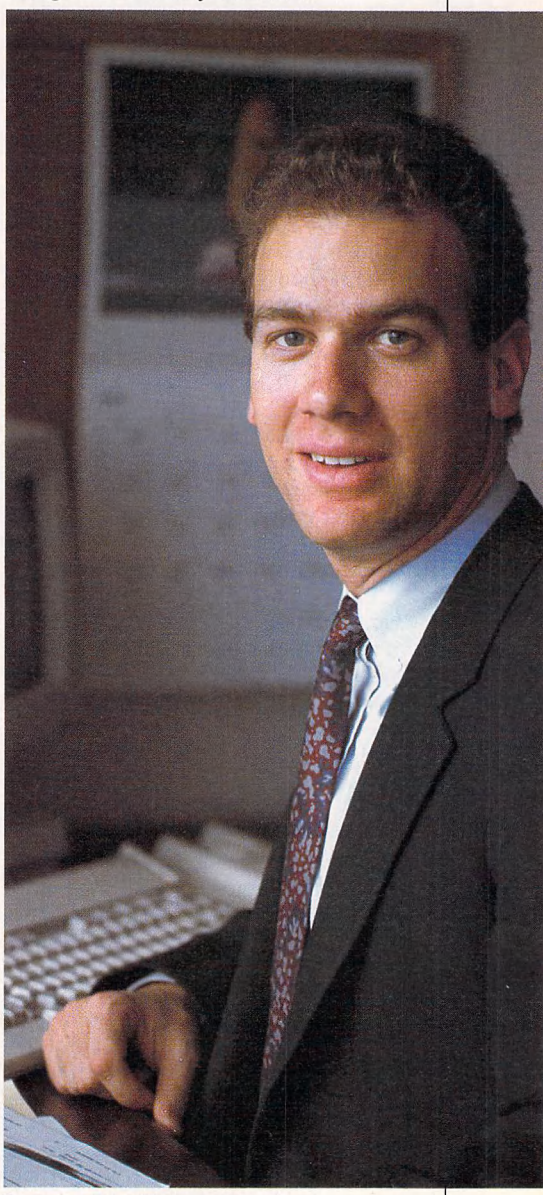
Eaasy Sabre also has a facility that allows users to look at schedules offered by particular airlines—a boon to frequent fliers who want maximum mileage benefits. One United Airlines frequent flier who recently made a business trip between New York and New Orleans found that, if she changed planes in Washington, she could fly United (and get triple mileage) rather than flying one of the carriers that covered the route non-stop.

"I would have felt a little funny asking the company's agent to search it that way, because it would have looked as if I cared more about my mileage than the company's time," she admits, "but I didn't mind presenting her with those flights as the ones I wanted."

Travel agents' commission is based on the price of the ticket, and some cynics wonder how much incentive they have to find customers the best deal. "They can make dumb mistakes, like putting you in a hotel that doesn't accept credit cards," says Burke Pease, who travels at least 40,000 miles a year in his capacity as organizer of the San Jose Convention and Visitors Bureau. "I use a travel agent for the delivery of my tickets," Pease says. "But one of the most valuable things about being able to check flight information for myself is that I now go into my travel agent with an idea of what sort of fare to expect and what sort of places I'd like to stay."

Pease is a frequent user of the ABC Worldwide Hotel Service (GO ABC), which permits him to specify his lodging preferences according to price range, location and various amenities, such as whether a hotel has conference facilities or a business center.

Susan Waldron, who has been an agent in the San Francisco Bay area for 15 years, defends her profession by noting that if a travel agent consistently fails to get the lowest fare for clients, "they won't come back and they'll badmouth you." All the same, she thinks it is a good idea for travelers to look up flights online, because "the less time the travel agent needs to spend on the nuts and bolts, the more time there is to give a client real counseling and auxiliary services."



Garry Burdick

Prefers night flights: *Gat*

Photographic Illustrators/Tom Hogan

Online planning might save you money by helping you find bargains, but if you don't want to run up your CompuServe bill in the process, it is a good idea to use shortcuts when you can and to have some strategies up your sleeve.

Many subscribers, for example, recommend logging onto services such as OAG at the fastest modem speed possible, then downloading onto disk and reading the data offline. But not always: if you're looking primarily for fare information, for example, you'll be interacting at human reading speed with the computer as you check the restrictions on various fares—in which case, you might save money by logging on at 300 baud.

James Fite of Eaasy Sabre recommends different strategies for business trips and for pleasure travel. In the former case, there is usually less flexibility because, typically, you'll have to be in a particular city on a particular day. "The best approach is to start with flight availability, limiting the search according to features that might be important to you, such as non-stop flights. When you find the flight, go ahead and reserve it, selecting the Y class of service, full-fare coach. Then plan your return trip, booking the most convenient flight in Y also. And then go back and price what the lowest available fare would be for those flights."

Often, according to Fite, the restrictions will be the kind that any business traveler can live with—such as paying for a round-trip ticket a certain amount of time in advance.

If you're vacationing or if you otherwise have greater flexibility, Fite recommends that you start not with flight availability but with fares. "Go through the round-trip fares from lowest to highest, checking the restrictions. The key thing to note is the particular class of service, which might be represented by a B or an F or some other letter [not a Y]. Then check flight availability, looking for flights with that service."

(The same convenience-versus-price qualifying process can be used when pricing rental cars. Does it make more sense to drive back to your original destination, or to pay a drop-off fee? Can you schedule the driving portion of your trip to qualify for weekend rates, which are usually cheaper?)

Stacey Holland of OAG recommends that even after you book your airline seat, you should print out the schedules of flights on your route and take it with you on a business trip.

"I like to print out the five flights before the one I'm booked on and the five flights afterward," she explains. "That way, if you find yourself held up two hours at a meeting, you won't feel stranded in the middle of the airport." Just pick the new return flight that is most convenient and book it. (This is especially convenient if you find yourself in a city, such as New York, which has more than one airport. Instead of heading for LaGuardia and having to wait several hours for the next flight home, you might be able to locate and reserve space on an earlier flight out of Newark.)

Pease urges new subscribers to "be patient and budget enough time to learn the system. Once you master it, it is a piece of cake," even if it seems confusing the first time around. Another tip from Pease is to save your airline schedule search session to disk and then edit it with your word processor. "It is a time-saving way to have a copy of your itinerary."

Chemist Iris Ailin-Pyzik of Granville, Ohio, likes to use a communications program (such as Relay Gold for IBM compatibles or MicroPhone for the Macintosh) that contains a scrolling feature. That way, she can page back and recheck information from earlier screens. "Sometimes I turn off the paging feature altogether and let it all scroll through, and then I go back and look at what I have" without having to log off first.

Florida Forum Members Welcome Vacationers

Although many of CompuServe's forums offer special online services to their members, the Florida Forum is probably the only one that throws in an offline welcoming committee. "Any subscriber who asks us will be greeted at the Orlando airport and taken out for coffee and Key Lime pie," says Forum Administrator Larry Wood. "It is a tradition. People say the computer is cold and impersonal, but here we're a family. We want the forum to be as friendly as Florida itself."

There is a goofy, down-home ambiance on the forum, from its Family Calendar (where regulars are wished happy birthday during the opening bulletin) to the Disney fun fact for the Week. (According to one recent fun fact, "more than 117 million hamburgers and nearly 41 million hot dogs have been served in the vacation kingdom since 1971. Laid end to end, they would form an 'autobun' 16 hot dogs and 16 hamburgers wide from Frankfurt to Hamburg, West Germany—with enough remaining to feed every person in a community of 5,000 a hamburger or hot dog at every meal every day for more than 12 years.")

But along with the light-hearted stuff, the forum provides plenty of information for vacationers. Do you want to know where to check into the world's only underwater hotel, swim with dolphins or visit the only living coral reef in North America? Do you need the latest prices at Walt Disney World or this week's weather forecast? Just ask. Wood is also glad to answer more unusual requests—such as that of the subscriber who recently needed to locate airport-to-town transportation for the disabled, or the Minnesota businessman who wanted to find bicycle paths to use on his next trip to northern Florida.

Walt Disney World

Disney World: *Main Street USA*

The forum prides itself on providing the kind of information that only a native might know. "You get the real skinny from us," Wood says, "not just what the tourist boards would tell you. For instance, you should never stay in a hotel in Key West—the guest houses have much more charm." Many of the regulars on the forum are employees of major tourist centers such as Epcot Center, Walt Disney World and the Kennedy Space Center, and they frequently offer behind-the-scenes tips.

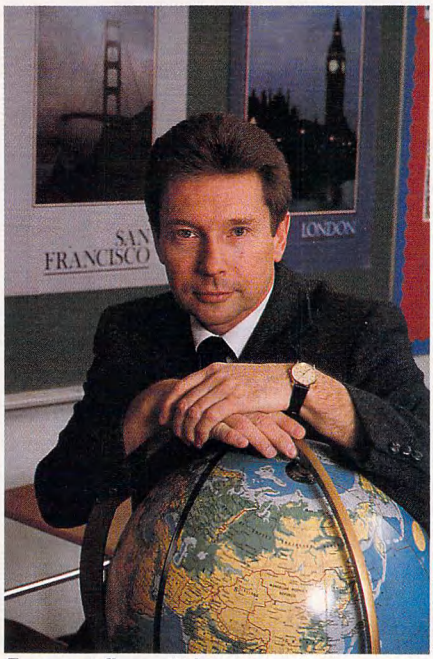
Wood, a former security officer, adds that he has the greatest job in the world. "I help people plan their vacations, and then I get to share their memories. It is like going on vacation every day of the year."

—LVG

Donald Wilcox, a Denver math teacher, is a TWA frequent flyer who regularly logs on to search for special Travelshopper deals he can take advantage of over the long Christmas and summer school vacations. ("My big love is Great Britain," he says, and he often visits a friend who lives in Cornwall.) He also frequently gets information about hotels online, and he urges other users to take advantage of their ability to send telexes from their terminals when booking rooms.

"It is nice when you're making reservations in Britain or Europe because it is fast, but unlike the telephone, you don't have to worry about the time difference when you contact the hotel. The new fax service online could probably come in handy the same way." The trick, Wilcox adds, is to make it clear to your recipient how to answer you. "You absolutely need to furnish your CompuServe User ID number." (For details, consult the Help section of EasyPlex.)

Even small keystroke-savers save you money online. Consultant Earle



James Cook

Frequent flyer: *Wilcox*

Robinson, a part-time New Yorker whose official residence is in Monaco, types "GO OAG-200" to get right into the Official Airline Guide system, skipping the introductory screen.

Of course, online planning isn't limited to the factual information one can get from the databases. The opinions of other travelers—those who have already been where you want to go or maybe even live there—can give you special insights.

CompuServe forums such as the Florida Forum (see accompanying story) and the Travel Forum (GO TRAVSIG) are places where users can exchange candid tips on which airlines serve the best food and what hotels give the worst service. More specialized but equally valuable to those who are looking for particular types of vacations are the Sailing Forum (GO SAILING), Scuba Forum (GO DIVING) and Outdoor Forum (GO OUTDOORS), which features information on hunting, fishing, camping, climbing, boating, birding and skiing.

The greatest resource in all of these forums is other users, many of whom are travel professionals. Why do they like the British themselves do." Another money-saving tip: "Buy the British Telecom Phonecard, which is available at newsstands, and use it to call home. It is cheaper than any other rate."

As a CompuServe user, Roth has used Eaasy Sabre, Travelshopper, OAG, ABC Hotels, State Department Advisory and Visa Advisors at one time or another. His wish list, however, is for even more online services. "I'd like online airline seating configuration, and information about how best to get from the airport to the city."

Roth likes to carry a copy of the OAG pocket flight guide ("the next best thing until the day you can log on from your laptop in the air"), and he frequently obtains copies of the Yellow Pages abroad and brings them home to help him plan for his next trip. And there always is a next time.

"My philosophy of traveling is to always save something for the next trip. In London, I've done plenty of unusual things, from attending trials in the Royal Courts of Justice in the Strand to going to hear Big Ben chime at midnight. And I've seen the whole Royal Family at one time or another—but I've never seen the Changing of the Guard at Buckingham Palace."

—LVG

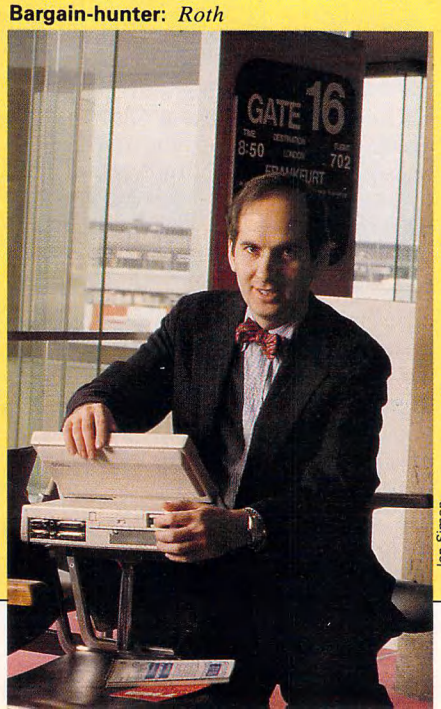
En route Planning Made Simple Online

Unlike vacationers who can take advantage of airline tickets that have to be purchased far in advance, New York wire service journalist Robert Roth usually has to make his travel plans on short notice—either to chase after feature stories or to fit his vacations around them. At the same time, he is a man who loves a bargain—although, he admits, "my idea of a bargain is flying to London to get a good deal on a Burberry's raincoat."

Roth, who holds a TWA gold card, has flown on the Concorde and traveled to Europe, the Middle East, Canada, Mexico, and all over the Caribbean and the United States; he is currently planning a pleasure trip to Australia and a business trip to cover the Paris Air Show. But his favorite destination is Great Britain, where he has been 13 times, both for business and pleasure. Last winter, he managed to find a special "K class" fare on Travelshopper that allowed him to fly between New York and London on TWA for $379 round trip.

Roth is a fountain of information for bargain-hunting offline, too. "If you go to a foreign destination and there's a bargain for tourists, find out if it is really the bargain they tout," he advises. "For example, in London the public transport authority offers something called the Explorer Card, which gives you unlimited access to the buses and underground trains. But if you do some calculations, you'll find that you'd have to spend all day riding the bus to make back the fare. It is better to buy a London Transport Travel card

Bargain-hunter: *Roth*



Jon Simon

bother dispensing free advice? "I guess I like to show off," admits Waldron, but she adds that she too gets plenty of useful information from the Travel Forum—like the time she was at home sick and read a notice that a tour company her agency did business with had gone bankrupt. "It also keeps me updated and in contact with the traveling public," says Waldron, who is currently training other travel agents.

Her favorite user request? "The guy who was planning a romantic second honeymoon and wanted to know about private sailboat tours where he and his wife and the crew could all go nude." (He found some, too.)

"The kind of information you can get is amazing, no matter where you want to go," says Long Islander John Woram, author of numerous computer-related books and a veteran traveler himself. "Someone will ask if anyone knows anything about good food in Vietnam, and within a day, there'll be instructions on what alley they should go up in Saigon to get to this obscure but wonderful little hole in the wall."

Adds advertising executive Roger Honkanen of Rochester Hills, Mich., "If you ask where you can stash your duffle bag in Katmandhu, somebody knows." He loves to help other users enjoy places he has enjoyed, from the Edinburgh Inn with resident peacocks on the lawn where he recently spent his honeymoon to the best greasy spoon in Kennebunkport, Maine, where he has shot several commercials. (It is called the Chat 'n' Chew Cafe, and it is full of "all these guys with hats with ear flaps, swapping stories and saying 'yup' and working seriously on building their cholesterol counts.")

"What you get is a much more personal and less touristy view of a place," says Michael Gat, who has used the Travel Forum to get tips on everything from neighborhood Mexican restaurants in Los Angeles to how to get refunds from airlines that overbook.

Many "regulars" add, however, that it is considered inconsiderate for users to post questions that virtually ask other users to do basic homework for them, or to furnish information on topics easily researched through guide books or the Chamber of Commerce.

"It also helps to be as specific as possible," says Robert Roth. "If you ask for recommendations for a good, non-touristy, Italian restaurant in New York where two people can have dinner with wine for under $100, you'll have a much better chance of finding useful replies than if you just ask something general such as, 'Where should I go on vacation?' "

Not that the best laid plans of online travelers don't sometimes go awry. "Last year I was looking for a family package in Mexico," says Pease. "I wanted a reasonably priced resort with plenty of activities for both adults and kids, and I spelled out my request on the Travel Forum. I got three or four responses, including a recommendation in Manzanilla that sounded perfect. It wasn't listed in any of my travel guides, and I thought I had really struck it rich. I was thrilled!

"Unfortunately, they were already booked. But wait 'til next year."

Lindsy Van Gelder writes for Ms., The New York Daily News, Town & Country, Rolling Stone *and other magazines. Her CompuServe User ID number is 70007,1416.*

First Resort:

by Terri Stone-Conrath

You have made the decision. This is the year you are taking that vacation you've dreamed about for years. You have found great airline reservations, but now want unique accommodations.

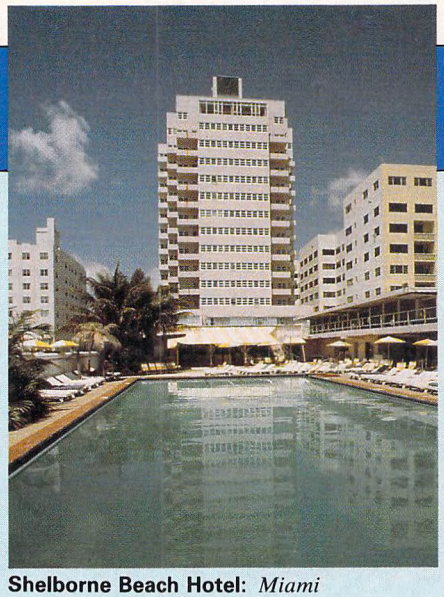
Business travelers also experience this pleasure crunch. After trudging from city to city to sit through meetings and presentations, many executives would jump at the chance to unwind at a refreshingly different type of accommodation. But where are these places, and how do you find them?

Many lodging options—from Florida beachside hotels to European chateaus—are available online. Locations run the gamut from tourist traps to remote hideaways. And pricing and amenities climb the scale from basic to deliciously luxurious. So there's surely something for everyone.

"Online facilities to search or reserve hotel rooms offer a big advantage in that most people do not own a Mobile hotel guide or any other print guide," says Jill Falb, CompuServe product manager for travel services. "And even travel agents cannot always provide as much detail as these services offer."

At Endless Vacation Travel (GO EV), resort condominiums are the specialty. The condos offer kitchens and extras such as hot tubs and microwave ovens. You can choose a condo by region, by specific city or area, or by desired recreational activities, such as gambling, golfing or old-fashioned relaxation. Besides condos in the United States, Mexican and Caribbean condos also are offered. Weekly rental rates typically range from $299 to $699.

If tanning in the Florida sunshine is your idea of heaven, GO BH and discover the fanciful array of beachside accommodations Bargain Holidays has to offer. Listings are by city and feature a description of the hotel's design, facilities and room rates. You can make reservations through Bargain Holidays and receive an EasyPlex confirmation.



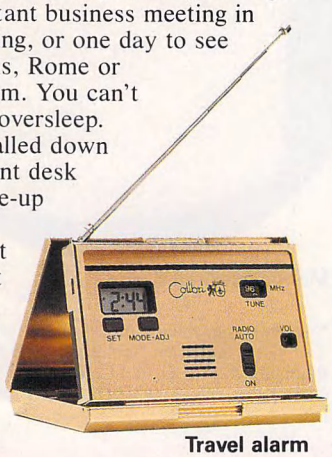
Shelborne Beach Hotel: *Miami*

To be sure the place you choose has everything you want, check into the ABC Worldwide Hotel Guide (GO ABC). This listing of more than 30,000 hotel properties worldwide offers such details as hotel name, street address, location within the city, phone numbers, hotel size, room rates and facili-

'At Home' Anywhere Travel Accessories

by Cindy Morgan

You're in a strange bed in a foreign country. You're tired after a long day's journey into the night, but you've got an important business meeting in the morning, or one day to see all of Paris, Rome or Amsterdam. You can't afford to oversleep. You've called down to the front desk for a wake-up call, but you're not sure what language, or which time zone, it will be delivered in.



Travel alarm

No problem. You've made a trip to The Electronic Mall® before making this trip. You're prepared for almost anything.

Smart travelers always set an alarm, and you've brought along the Alarm Clock Card, a travel alarm with a full-feature LCD clock, jumbo display, 24-hour alarm and snooze feature. It is one of three travel alarms you found at Sharon Luggage & Gifts.

The alarm rings and you bound out of bed. First things first. You plug in Quik Cafe, your portable coffee maker, another find from Sharon Luggage & Gifts. It is faster than room service. You need a jolt of caffeine to conquer your jet lag. (Of course, you've packed a one-quarter pound bag of your favorite blend from Coffee, Anyone??? and a four-prong Foreign Voltage Converter kit from Sharon Luggage & Gifts.)

While the coffee brews, you take a compact travel kit from your overnight bag and head for the shower. Your Bloomingdale's Bath Set, a three-compartment kit, is packed with wooden body and nail brushes, a bath sponge and other products for pampering yourself.

Mini facial sauna

Freshly showered, you shave with the Sanyo battery-operated travel shaver. Perhaps you indulge in a quick facial with Hammacher Schlemmer's Smallest Facial Sauna.

No need to use your adapter here, though. This facial, designed specifically for travelers, weighs only 1¼ pounds and features dual voltage for worldwide use.

As you sip your coffee, you prepare for the day. Even though you carefully packed your wardrobe in the handsome ensemble you purchased at the luggage department of Bloomingdale's or Sharon Luggage & Gifts, your clothes for today could use a little touch-up. Out comes Hammacher Schlemmer's Most Powerful Portable Steamer. (It even has a snap-on crease attachment for perfect pleats.)

Portable clothes steamer

Before heading for breakfast, you decide to make a quick call home. "What time is it there?" you wonder. You quickly consult your World Time Voice Alarm, which gives you the time for cities in 19 time zones.

Now it's time for breakfast, and your International Currency Converter is close at hand to tell just how much that croissant and second cup of coffee will cost. Francs. Deutsche marks.

Unique Lodging

ties on the premises. In addition, nearly 7,000 listings offer information about the hotel's appearance and atmosphere, including style of architecture, dates of renovations, type of clientele and any awards a hotel has won. ABC may add ratings similar to AAA hotel ratings in the future.

To make the best use of ABC, enter the database and select the city/community and state you will be visiting. You are shown the number of hotels in that area and given the opportunity to narrow the search further by location, price, specific hotel chain or facilities. Once you've narrowed your choices, you can elect to see your final hotel selections. From these, you can learn more about individual hotels.

You also can make reservations online. Eaasy Sabre (GO SABRE) takes convenience one step further. This service, supplied by American Airlines, enables you to search for lodgings in the United States and in many international locations.

Will it be a bed-and-breakfast inn in the California wine country, a chateau in Switzerland or a castle in Germany? Once you choose that ideal place from the 18,000 listings, reservations can be made 24 hours a day. There is no charge to join the service.

"Eaasy Sabre was developed for individuals who want to take control of their travel planning, making it easy for them to look for information they need, and easy to book the itinerary of their choice," explains James Fite, American Airlines account executive of corporate and consumer products.

Travelshopper (GO PARS) provides similar "control" opportunities for travelers in search of the perfect accommodation.

So, who says your next vacation or business trip has to be the same old thing? Be creative. Try out your lodging ingenuity online and put some spice into your life!

Pounds. Lira. Wherever you are, you've found you can count on this device for quick, accurate conversions.

Your meeting goes well. Or perhaps

Personal Tour Guide

you play tourist and take in the sights. Suddenly, it is time for lunch. You reach into your breast pocket for your Tripp® Personal Tour Guide, a hand-held computer featuring information on restaurants, hotels, airfares and more for 84 cities worldwide.

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Sleep sound machine

After dinner you take out your round monogrammed flask from Brooks Brothers and pour yourself a light libation. You crawl into bed with your slipcased collection of *Tales for Travelers*, a wonderful selection of 12 stories by the masters that you discovered at Coffee, Anyone???. What better way to end a long day than with a nightcap and a bedtime story? Truly, this is home away from home.

Monogrammed flask

A Shopping Guide Sharon Luggage & Gifts (GO SL) Hammacher Schlemmer (GO HS) Bloomingdale's (GO BL) Coffee, Anyone??? (GO COF) R+R Direct (GO RD) Brooks Brothers (GO BR)

Vive La France!

This is *the* year to see France. Celebrate the bicentennial of the French Revolution. Head to Paris in the spring, summer or fall. France has a full year of festivities planned.

Tour the Louvre. Made into a museum during the Revolution, it is the home of Venus de Milo, Mona Lisa and other masterpieces. Stroll the Gardens of Luxembourg. Visit L'Arc de Triomphe. See La Bastille, the site of the old prison seized by the people on July 14, 1789. Take a trip to the top of the Eiffel Tower. Inaugurated during the Universal Exposition of 1889, the tower celebrates its centennial this year with continuous sound and light shows.

Air France (GO AF) offers a variety of packages, including Bonjour Paris and The Paris Aristocrat. Each includes round-trip economy airfare between an Air France USA gateway city and Paris, hotel accommodations and many extras. Packages to the Riviera and Monte Carlo are offered, too. You can also borrow from Air France's free video library, order free travel brochures and request a free map of Paris—all through Air France's online store.

Before you go, visit Penguin Books (GO PB) and order a copy of *The Penguin Guide to France 1989*, highlighting out-of-the-ordinary restaurants, shops, activities and sights. Dozens of day trips from Paris are featured. A second book you'll want to tuck in your carry-on bag is *Street French: How To Speak and Understand French Slang*. Available at The John Wiley Bookstore (GO JW), this practical guide offers an interactive, step-by-step approach to French as it is spoken by native speakers.

Booked To Go

Traveling elsewhere? Check out the other travel book selections at Penguin Books (GO PB) and John Wiley Bookstore (GO JW). The Penguin travel series features guides for Australia, Canada, the Caribbean, England and Wales, Ireland, Italy and New York City. If you're a globetrotter, you'll want to pick up *Passport To Europe's Small Hotels and Inns* and *Do's and Taboos Around the World*, both available at the Wiley Bookstore. The latter is an amusing guide to proper protocol, customs and etiquette around the world—from what to wear for a state dinner in the Soviet Union to the proper toast to offer in Germany. Also included are tips on how to dine diplomatically on delicacies such as sheep's eyes in Saudi Arabia and bear's paw soup in China. Hand gestures, body language and American lingo to avoid are all here in this humorous tour of the customs of the world.

Cindy Morgan is a promotion consultant to The Electronic Mall and a free-lance writer. Her CompuServe User ID number is 70007,1525.

Ask Customer Service

Q: What can I do offline to make my online sessions as economical as possible?

A: Your equipment and software documentation can be invaluable in helping you to save money on CompuServe. Before logging on, be sure to read the documentation that accompanies your equipment and software so you are aware of the capabilities of your equipment. Learn whether your software supports XMODEM protocol and if it has high-resolution graphics capabilities. Make sure your printer is hooked up correctly. Reading ahead can save hours of frustration and wasted time online.

Q: How can I familiarize myself with CompuServe before searching through menus online?

A: There are several good sources of information about CompuServe products: *The CompuServe Almanac*, the CompuServe Information Service Users Guide and *How to Get The Most Out of CompuServe*. These books offer tips for navigating the service and list products available online. They can be ordered online by typing GO ORDER at any CompuServe prompt. The ordering area is free of connect-time charges.

Q: Which is the most economical baud rate for me to use?

A: Generally, a new member getting used to menus and commands should log on at 300 baud to read the menus as they scroll by. If downloading a file rather than reading text, 1200 baud and 2400 baud are more efficient. While transmission occurs four to eight times faster at 1200 and 2400 baud, the cost is only twice that of 300 baud.

Q: Are there any menu shortcuts that I can take?

A: Once you are familiar with using menus, you can use GO commands (such as GO CB, GO EASY) to navigate through the service quicker. A GO command takes you immediately to a service, bypassing the menus.

The Find command is also useful if you are not sure where a specific service is located. Type FIND TRAVEL, for example, for a list of travel services. Two commands that also save time are the Quote and Weather commands. These commands can be typed at any prompt. You will be prompted for either a ticker symbol or given the local weather forecast.

Greg Miller

Answers billing queries: *Wasmus*

Rep of the Month

Kirk Wasmus is a CompuServe customer service representative from 9 a.m. to 6 p.m. Monday through Friday. He is empathetic with customers who call with billing questions. "I am satisfied when I am able to make a difference in a member's situation," Kirk says. "Billing information is available online (GO BILL) and customer service representatives are always available through online Feedback (GO FEEDBACK).

Kirk studied accounting at Drake Business School in Ft. Lauderdale. He enjoys news, weather and following the stock market on CompuServe. He prefers working during the day so he can spend evenings and weekends with his wife, Roberta.

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Online Today offers CompuServe members the chance to win 10 hours of connect time (a $60 value) by writing a 200-word essay on how they use the Information Service.

Essays should be typed double-spaced and sent to *Online Today*, CompuServe Incorporated, 5000 Arlington Centre Blvd., P.O. Box 20212, Columbus, OH 43220, or via an EasyPlex message to 70003,3246. Please include your full name, address and User ID number.

Winning essays are published in *Online Today*.

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Some travelers use Travelshopper from their homes to view available choices in air carrier, prices and departure times. They can book the last seat, knowing that it really is the last seat.

I use the service to scan available flights on a particular day to see which flights are heavily booked. I also can see which flights have a lot of empty seats. Armed with this information, I go to the airport and purchase a space-available ticket on a flight with the fewest reservations, knowing the odds are good that I will get on that flight. I also note other "high-probability" flights and departure times as additional options.

With CompuServe, you can plan space-available travel *and* save 50 percent off the ticket price.

Rick Fischer
Germantown, Tenn.

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Current CheckFree transfer amounts can be viewed online free of connect-time charges within the first week of each month. CheckFree payment notices are no longer mailed. Accessing electronic CheckFree statements is fast and easy. Online instructions are available. GO CHECKFREE

Intel Above Board

286 Memory Expansion

Intel Corp.
5200 N.E. Elam Young Pkwy.
Hillsboro, OR 97124
800/538-3373

Computers: IBM PC, PC-XT, PC-AT and compatibles using 80286, 8088 or 8086 microprocessors.
Operating System: PC-DOS or MS-DOS version 2.xx.
Features: Three kinds of memory providing conventional memory from 256K to 640K and up to 2MB of LIM/EMS 4.0 expanded and/or AT-style extended memory; additional 2MB available for a total of 4MB with optional piggyback board; switchless installation; RAM disk, print buffer and diagnostic software included; toll-free technical support.
Options: Piggyback board with 512K RAM expandable to 2MB ($545).
Model Tested: Above Board fully populated with 2MB installed in TeleVideo TeleCat 286 with 1MB standard memory and 40MB hard disk, LaserJet Series II printer; software used includes PageMaker 3.0, WordPerfect 5.0, Lotus 1-2-3 release 2 and Publisher's Paintbrush.
Base Prices: $645 for basic 512K Above Board; $2,295 for fully populated 2MB Above Board.

Reviewed by William J. Lynott

With memory-hungry software springing up everywhere, the 640K of RAM that is now standard on many desktop computers sometimes seems fairly anemic. Even the 1MB supplied on many 286-based machines is not enough for complex page layout or CAD programs. For many applications, memory expansion boards such as the Intel Above Board 286 take care of this problem.

DOS cannot address memory above 640K directly, but the Above Board comes with an Expanded Memory Manager (EMM) conforming to the Lotus/Intel/Microsoft Expanded Memory Specification (LIMS) 4.0. LIMS uses page-switching technology that lets application software take advantage of additional memory. This sounds complicated, but Above Board's documentation makes installation and use easy for anyone who is reasonably experienced with DOS and comfortable with simple plug-in card installations in PC expansion slots.

Above Board 286 has no extra ports or other physical enhancements. Its single purpose is to provide extra memory, without bother. Installation requires a 16-bit expansion slot, so be sure you have one available. One particularly appealing facet of the Above Board installation procedure is the board's lack of physical switches. Plug in the board and run a couple of utility programs to set the switches electronically.

As mentioned, Above Board's documentation is beautifully done. It is rich with illustrations, and the written instructions are brief and precise. A supplementary booklet, "Shortcuts to Installing the Above Board 286," is intended for users already familiar with the intricacies of DOS. If you know your way around DOS, this booklet will help you install Above Board in about 20 minutes. Even if you elect to complete the full installation procedure, you probably will not need more than 30 minutes for the job.

Once Above Board is properly installed in its slot, you must run a utility called "setboard," which serves the same purpose as setting physical switches on other add-in boards. Put the Intel diskette in drive A and type "a:setboard." Once you answer a few questions about your system and how you want to divide your new memory among conventional, expanded and extended portions, "setboard" does the rest. (If you have an IBM PC, you will also need to change some switches on SW2 of the computer's system board.)

If you allot some Above Board memory to conventional or extended memory in a 286-based computer, one more step is required: run your computer's setup program so that all parts of your system will be informed of the changes.

"Setboard," with the computer's setup program where needed, tells your system all it needs to know to allocate the additional memory to your specifications.

Above Board's install disk also contains software utilities that let you create optional RAM disks and a print buffer. If you pick an automatic option in the basic installation procedure, the Install program will create these two options for you. I installed the RAM disk and print buffers using the simple procedure, and both worked without a hitch.

Two other handy utilities are included with Above Board. One checks each memory chip individually to make sure all are functioning properly. Another reports the total memory available in the system, how it is allocated and how much is free for applications to use.

If you buy Above Board with only the basic 512K of RAM, you may upgrade at any time to the maximum of 2MB with any good quality 256K chips having a minimum speed of 150 nanoseconds. If you have a 10 MHz 80286-based computer, use 120-nanosecond chips for optimum performance. I used the Above Board at both the 8 MHz and 12 MHz speeds of my TeleCat 286 computer without problems.

Not everyone needs the beefed-up performance available through extra memory. Before you spend the considerable money involved, make sure that your software is capable of taking advantage of the LIMS Expanded Memory Specification or AT-style extended memory. Once you decide that you can use the extra memory, you will not go wrong by choosing the top quality Intel Above Board 286.

William J. Lynott is president of W.J. Lynott Associates, a management consulting firm in suburban Philadelphia. His CompuServe User ID number is 70007,420.

Go Online for Hardware Reviews

The following hardware review is available this month in *Online Today Daily Edition* (GO OLT-220).

Filesafe Tape Drive for Hard Disk Backups
Manufacturer: *Mountain Computer.*
Computers: *IBM compatibles.*

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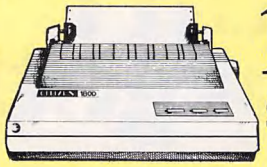

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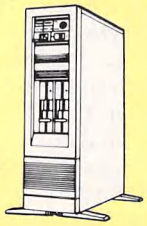

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Operating Systems: MS-DOS or PC-DOS version 2.1 or higher; PC-DOS 3.3 on PS/2 systems.
Media: Distributed on six 5.25-inch diskettes; also available on 3.5-inch diskettes; requires two diskette drives or one diskette drive and a hard disk (recommended).
Copy Protection: None.
Required Peripherals: None.
Other Requirements: Minimum 512K RAM.
Optional Items: Hard disk; color monitor; printer (supports Hewlett-Packard LaserJet and most popular dot-matrix printers).
System used for test: 512K Victor V286 computer with 1.2MB diskette drive, 20MB hard disk and EGA color monitor.
List Price: $199.95

Reviewed by Franklyn Jones

With the market saturated with word processors, many people may think, who needs another one? But Beyond Word Writer is an impressive product. Like a Swiss army knife, it does almost everything you can imagine.

Because of all the features contained within BWW, it takes up nearly 2MB of disk space. Although you can get by with a dual diskette system, you are better off with a hard disk. BWW is installed in less than 10 minutes by following the steps in its install program. Various files are distributed in multiple subdirectories with appropriate path names; however, BWW is loaded from the root directory.

A most impressive feature of BWW is its user interface, which is as versatile as Borland's Sprint word processor. The standard interface provides pull-down menus, and extensive use of the Alt, Control and function keys can duplicate most menu options. So most commands are available either through menu selections or keystroke combinations.

If you don't want to learn a new command set, BWW lets you switch easily to the same user interfaces you would find in Microsoft Word, WordPerfect, WordStar or many other word processors. There is even an interface that emulates Lotus 1-2-3. I tried these various command sets, and they seemed to work well. However, I did find certain commands, notably from Microsoft Word, that were not implemented in BWW. If you choose to try the standard BWW interface, you will find it easy to learn and use.

BWW's list of features is unexpected in a program priced this low. For example, BWW supports on-screen multiple columns, column sorting and calculations, table of contents generation, indexing, footnoting, bookmarks, mail merging, macro processing, access to DOS, line and box drawing, password protection, background printing, multiple document windows and a built-in calculator—a lot for $200.

There also are command options to restore deleted files and to save active files automatically at any interval you choose. Files can be loaded from and saved to any directory on disk, and file formats can be converted to and from many popular word processors. If you wish to save your work as a straight ASCII file, say for modem communications, you must type an @ symbol after the file name.

After you finish creating a document, you can use a 100,000-word spelling checker. The "soundex" spelling checker matches words phonetically, which is genuinely useful. BWW also provides a proofreader that catches other typing irregularities and a 240,000-word thesaurus. Then you can check the program's readability index to make sure your document is easy for your audience to read and understand.

The program is so easy to use, you probably will not need the manual. If you do need help, you will find the manual and context-sensitive online help system satisfactory, though not spectacular.

BWW also has shortcomings. For example, BWW's performance is acceptable but a bit slower than other word processors. I encountered several occasions where a "Wait..." message appeared on screen for a moment during various operations. It seemed that performance degradation increased with the size of the active document file, but I could not find anything in the documentation indicating maximum file size.

Formatting and printing documents —especially simple letters—are easy, thanks to the menu-driven system, but if you specify multiple display attributes, you will likely find it a bit awkward. BWW will display a "printer codes dialog box" and ask that you select ASCII control codes corresponding to such attributes as italics and boldfacing. This can be confusing to users not accustomed to such tasks. Worse, however, is that there is no apparent support for directing output to a serial port and no provision for installing more than one printer at a time.

Timeworks, the company that markets BWW, has a knack for developing efficient software packages that are affordable, and Beyond Word Writer is no exception. Even with its shortcomings, I found this package a delightful surprise and on a par with many word processors costing much more. The product comes with free technical support and a money-back guarantee. An offer like that is tough to refuse.

Franklyn Jones was formerly the managing editor of Interface Age *magazine and editor and chief of* IBM PC Update *magazine. He has written articles for various computer publications, is a regular contributor to* Online Today *and serves as a marketing and communications consultant.*

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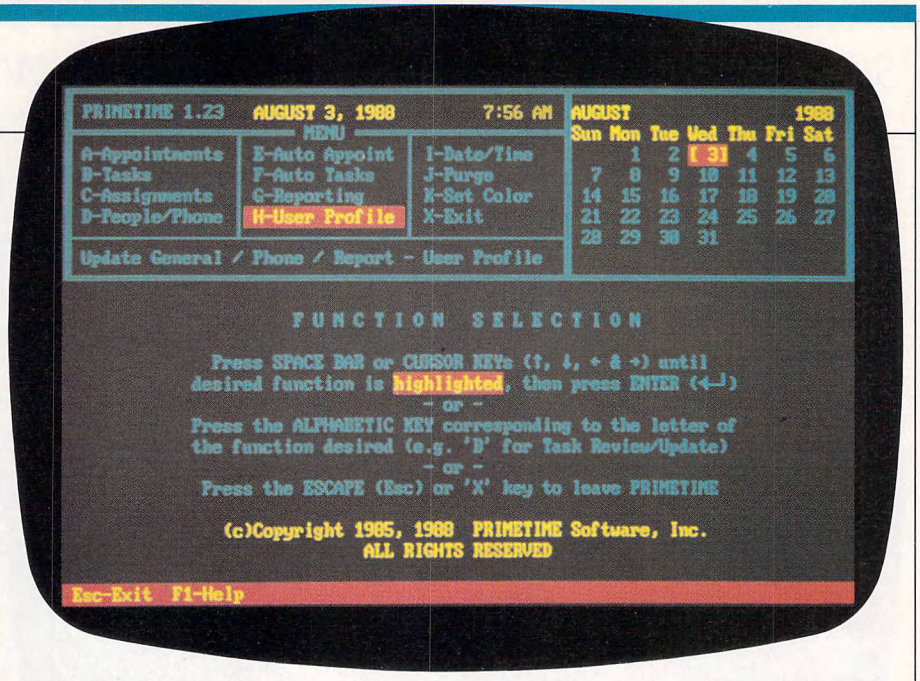
Operating System: PC-DOS or MS-DOS version 2.1 or higher.
Media: Supplied on 5.25-inch diskettes; available on 3.5-inch diskettes; requires two diskette drives or one diskette drive and a hard disk.
Copy Protection: None.
Required Peripherals: None.
Other Requirements: Minimum 128K RAM.
Optional Items: Printer; Hayes-compatible modem.
Systems used for test: (1) 640K Compaq Deskpro 286 with one 1.2MB diskette drive, one 360K diskette drive, one 40MB hard disk, Vega VGA adapter and NEC MultiSync II monitor; running MS-DOS 3.3. (2) 640K Compaq Portable with one 360K diskette drive and one 30MB hard disk; running MS-DOS 2.1. (3) 640K Compaq Deskpro 286 with one 1.2MB diskette drive, one 360K diskette drive, one 30MB hard disk and clone of Hercules Graphics Card; running MS-DOS 3.2.
List Price: $99.95

Reviewed by Harry Green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desired function is highlighted, then press ENTER (↵)
- or -
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Esc-Exit F1-Help

The one resource managers always lack is time. There are books, courses and seminars galore to teach you to manage time, but none can give you more than your allotted 24 hours per day. There are several ways your computer can help you manage the limited time you have, however. Primetime is an electronic calendar that provides a convenient process for administering time, a record-keeping system for tracking where it goes and an alarm to alert you to impending appointments.

You begin a typical workday by reviewing tasks carried over from the previous day, scheduled appointments and tasks you plan to accomplish that day. Primetime's screen is divided into three windows. The upper left is the menu of the program's functions. The upper right is a calendar with the current date highlighted. You can flip quickly to other dates with cursor and page keys, and return to the current date with the Home key. The main window shows details of appointments, tasks and assignments.

The program provides a people/phone menu where you can identify subordinates for making assignments and enter a telephone list of frequently called numbers so Primetime can dial them with your Hayes-compatible modem. Be aware that you can not easily use a modem behind PBXs and key telephone systems that use "proprietary" telephones. These nonstandard instruments will not accept a regular

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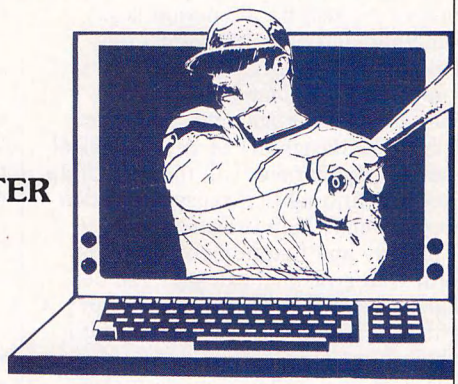

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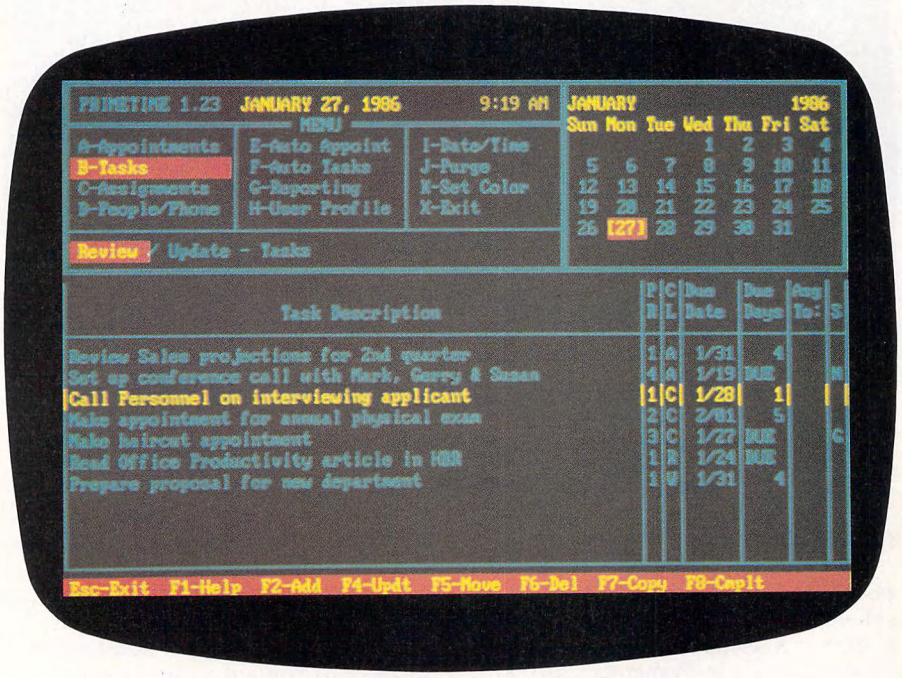


modem, so Primetime cannot dial through them.

Tasks and appointments are added on forms called by a function key. Function keys also move and copy appointments and tasks, show tasks completed, and change tasks to appointments or assignments and vice versa. The design of the keys is logical and quickly learned with the help of an excellent tutorial that takes about two hours. Online help is available.

Nearly any function you can perform with a manual calendar can be handled with Primetime, except carry it with you. To do that you must print it, which is another feature of Primetime. The print feature lets you list future appointments, completed assignments and tasks, and your calendar for past and future months. You also can purge outdated information from your calendar, which is a specialized database.

Primetime operates as a standalone or "terminate and stay resident" (TSR) program. Anyone who uses the computer daily will choose the latter, calling and retiring the program with "hot keys." Any TSR program offers the hazard of potential conflicts, and Primetime is no exception. It works fine with a color monitor, but I experienced trouble with a Hercules Graphics Card clone. When I flipped between Primetime and Microsoft Word in graphics mode, Primetime flashed a message that the light pen is not working (I don't have a light pen). On returning to Word, the screen was clobbered.

Primetime's technical assistance advised that conflicts with some graphics programs are impossible to resolve. With Word they suggested repainting the screen by pressing [SHIFT-CONTROL], which worked fine. I tested Primetime with another graphics program, Gem Desktop, but found no way to resolve conflicts.

I use the program regularly at work and find it a valuable asset. However, many managers work in an "interrupt" mode where episodes are frequent and short with little time to maintain a program like Primetime. Even with a high-speed computer, you can access a paper calendar faster, and if you have a managerial job you may have to change your style to use Primetime.

Yet other people have schedules that an electronic calendar fits perfectly. Professionals such as doctors, dentists and some attorneys schedule their time in advance and would find an electronic calendar a valuable tool. For such people, Primetime is highly recommended. It is logically designed and includes features you would need to move your scheduling from a paper calendar to the computer screen.

The only problem I find with Primetime is that the program does not advance the calendar automatically if you leave the computer on overnight. You have to access the date/time function on the menu and force it to change dates.

Like any program, however, you have to stick with it until it becomes second nature. With Primetime, it is well worth the effort.

Harry Green is a free-lance writer from Portland, Ore. He writes about telecommunications, office automation and personal computer-related topics. His CompuServe User ID number is 70007,431.

Go Online for More Software Reviews

The following software reviews are available this month in *Online Today Daily Edition* by typing GO OLT-230 at any CompuServe Information Service prompt. Many daily-edition and print-edition software reviews are supplemented with GIF graphics that may be viewed in or downloaded from Library 6 of the *Online Today* Readers' Forum (GO OLTFORUM).

Business Sense
Integrated Accounting
Manufacturer: *Monogram Software.*
Computers: *Apple Macintosh family.*

dBase IV Database Manager
Manufacturer: *Ashton-Tate*
Computers: *IBM compatibles.*

Who-What-When Resource Manager
Manufacturer: *Chronos Software Inc.*
Computers: *IBM compatibles.*

Turbo EMS
Expanded Memory Card Alternative
Manufacturer: *Lantana Technology.*
Computers: *IBM compatibles.*

The Magician
Business Presentation Graphics
Manufacturer: *IMSI*
Computers: *IBM compatibles.*

BackLoader
Laser Font Download Utility
Manufacturer: *Roxxolid Corp.*
Computers: *IBM compatibles.*

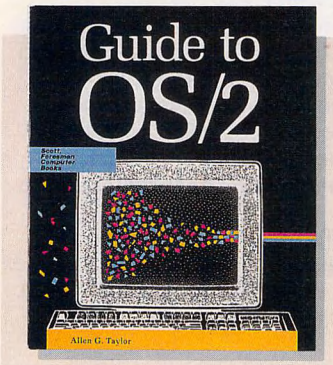
Cocoon Data Recovery Utility
Manufacturer: *Daybreak Technologies.*
Computers: *IBM compatibles.*

Disk Technician Advanced Utility
Manufacturer: *Prime Solutions Inc.*
Computers: *IBM compatibles.*

AutoManager CAD Utility
Manufacturer: *Cyco International*
Computers: *IBM compatibles.*

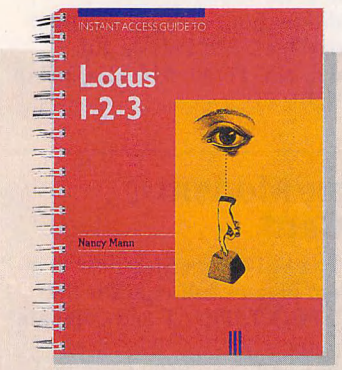
Online Book Reviews

Following are summaries of book reviews available for reading this month in *Online Today Daily Edition*. To read the complete reviews, type GO OLT-240 at any CompuServe Information Service prompt.



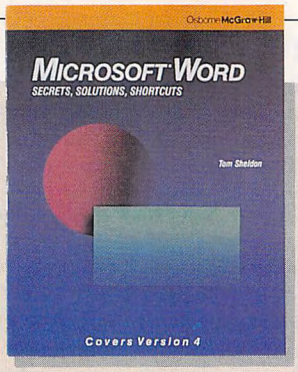
Guide to OS/2
By Allen G. Taylor
Scott, Foresman & Co., 1988
293 pages, $19.95 (softcover)

Deemed a solid OS/2 reference by reviewer Franklyn Jones, this book offers a good introduction to IBM's new operating system. Written in a tutorial approach, the guide includes brief exercises for practice programming. *GO OLT-5700*



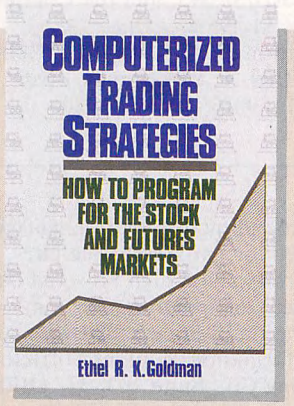
Instant Access Guide to Lotus 1-2-3
By Nancy Mann
Price, Stern, Sloan; 1988
248 pages, $14.95 (softcover)

Author Nancy Mann makes learning Lotus 1-2-3 easy, according to reviewer Robert Sanchez. Not only is the book expertly organized for easy reading and reference, but it also is expertly written, making it an ideal tool for the new or infrequent 1-2-3 user. *GO OLT-5730*



Microsoft Word: Secrets, Solutions, Shortcuts
By Tom Sheldon
Osborne/McGraw-Hill, 1988
752 pages, $21.95 (softcover)

Reviewer Darrow Kirkpatrick calls this book a thorough introduction and reference to Microsoft Word 4.0. Graphic examples and numerous "tips" and "traps" provide key information for newcomers and experts. *GO OLT-5720*



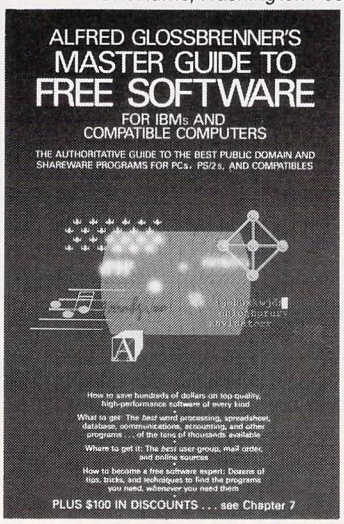
Computerized Trading Strategies: How to Program for the Stock and Futures Markets
By Ethel R.K. Goldman
John Wiley & Sons, 1988
264 pages, $29.95 (softcover)

Designed for the novice investor and computerist, this book attempts to instruct the reader on mastering the fine points of the stock market and a computer. Reviewer William J. Lynott says that the book is necessarily superficial, but it offers the beginner valuable instruction on keeping track of a portfolio for the stock and commodities markets. *GO OLT-5710*

FREE SOFTWARE!

"Exhaustive and detailed....There's an enormous amount of public domain and shareware in the world, and a fair amount of it is either junk or of interest only to experts....Urgently needed." —*N.Y. Times*

"You could save ... hundreds, possibly thousands of dollars."
—Brit Hume, *Washington Post*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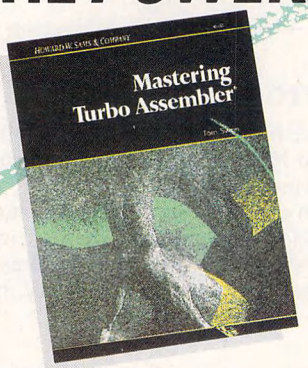

Now you can control the unique features of Borland's newest language product with Mastering Turbo Assembler. This invaluable tutorial and advanced-level reference guide by Tom Swan is ideal for MS-DOS programmers, developers and students. $24.95.
From Howard W. Sams & Co.
GO WB
Walden*COMPUTER*Books

LapLink Plus

Traveling Software and Toshiba America are jointly introducing a specially packaged private-label version of LapLink Plus micro-to-micro laptop/desktop connectivity system as an option to the Toshiba line of portable computers.

LapLink Plus accomplishes fast serial file transfers effortlessly and enables the user to work directly with files or printers on either connected system. Features include split-window display, simple file tagging, graphical directory tree-style interface and transfer speeds up to 115,000 baud. The retail price is $129.50.

For information, contact Toshiba America Inc., 9740 Irvine Blvd., Irvine, CA 92718; 800/457-7777 or GO PCVEN on CompuServe.

Co/Session Communications

Triton Technologies has introduced CO/Session (version 3.1), a communications software program that allows two microcomputers to work together as one or one micro to remotely control a second machine.

Two versions are available, allowing the user to select between a command line or menu-driven interface. New features include a streamlined installation procedure, command line loading, screen blanking, additional modem support and several new configuration options.

For information, contact Triton Technologies Inc., 200 Middlesex Essex Turnpike, Iselin, NJ 08830; 201/855-9440.

High-speed Modem

US Robotics has expanded its Courier high-speed modem line to include the Courier HST Dual Standard and the Courier V.32 modems.

Both external, rack-mounted modems are ideal for desktop and data center communications needs. Both include compatibility with the entire installed base of 2400-, 1200- and 300-baud modems as well as MNP Class 1-5 error-checking and data-compression modems.

The Courier HST Dual Standard modem costs $1,595, and the Courier V.32 costs $1,495.

For information, contact US Robotics Inc., 8100 N. McCormick Blvd., Skokie, IL 60076; 312/982-5010.

PC Comscope

Telebyte Technology has introduced the Model 902 PC Comscope, a product that allows users to view on the computer screen the bidirectional data and control signals of any RS-232 communication link.

The PC Comscope allows monitoring of Async, Bisync and HDLC protocol formats with either ASCII, EBCDIC or IPARS data formats. Built-in help screens assist the inexperienced user. The retail price is $399.

For information, contact Telebyte Technology Inc., 270 Pulaski Rd., Greenlawn, NY 11740; 516/423-3232 or 800/TELEBYTE.

Mirror II Software

SoftKlone Distributing has introduced Mirror III data communications software.

An upwardly compatible replacement for Mirror II and DCA's Crosstalk XVI software, Mirror III features 100 percent Crosstalk compatibility, background ground mode, Script language and text editor, programmable integrated scripts and a high-powered data communications programming language. The retail price is $99.95.

For information, contact SoftKlone Distributing Co., Suite 100, 327 Office Plaza Dr., Tallahassee, FL 32301; 904/878-8564.

PC Fax/Modem Half Card

Max-Fax 9624 from Macronix is a fax/modem plug-in half card for the IBM PC, PC-XT, PC-AT and compatible computers.

Features include a 9600-baud fax transceiver for graphics and text communication and a 2400-baud Hayes-compatible modem for data communication over ordinary phone lines. Max-Fax will send or receive group three fax machine or PC fax card messages. Processing data to and from any Hayes-compatible 2400-baud modem, it provides micro-to-micro and micro-to-mainframe communication. For information, contact Macronix Inc., 2680 N. First St., San Jose, CA 95134; 408/434-1133.

XChange Plus Data Transfer System

Commtech International has introduced XChange Plus, an unattended electronic data transfer system for personal computers.

Patterned after sophisticated mainframe software, XChange Plus allows data to be transmitted at night when telephone rates are lowest and computers are otherwise idle. Any type of data, including spreadsheets, databases and documents, can be transmitted. Artificial intelligence techniques within the program address concerns of security and telephone expense.

Retailing for $245, XChange Plus features error-free transmission, automatic data compression, detailed history logs and a color map that depicts call progress graphically.

For information, contact Commtech International Inc., 2580 Cumberland Parkway, Suite 150, Atlanta, GA 30339; 800/678-8988 or 404/438-9999.

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Turn Your PC/XT/AT Into Multi-User, On-Line System

INFOHOST®
Multi-user On-line System Software
(Reviewed by PC Week on 5/19/87)

You can now place a database of goods and services on-line using your own PC, so your customers can dial in over phone lines to access information, leave messages, and make purchases via modem. InfoHost, which can support as many as eight simultaneous modem interfaces, features a customizable relational database that can be adapted to the needs of your business.

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1500 US & OVERSEAS JOBS!

See 1500 US & overseas jobs. Voice: 602 841 2134. Modem: 602 973 2002. 8 databits, 1 stopbit, no parity, 1200 or 2400 baud. Use user #: 192 and password: USOVER to sample system. Press ‹CR› twice to logon.

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NEW! Lotto Picker™ Plus v2.1 stores winning Lotto & Pick 3/4 numbers & uses probability analysis in order to select what might be your million $$ ticket. Guaranteed to work for all lotteries worldwide. Not copy-protected. For IBM, 64k Apple II, & C64/128 **$34.95** (+5.55 sh). 3.5" add $10. **GE RIDGE**, 170 B'dway, #201OL, NYC 10038. **Orders 1-800-634-5463 ext. 293.** Info 718-317-1961.

Guidelines to Requesting Information Through OLI

Online Inquiry

Online Inquiry is *Online Today*'s electronic version of the traditional reader inquiry card. To request additional information about products or services described in *Online Today*, simply access CompuServe and type GO OLI at any prompt.

CompuServe Page OLI-1
ONLINE TODAY ADVERTISERS
ONLINE INQUIRY (OLI)

1. OLI Instructions
2. Online Today Display Ads
3. Print Edition Reviews
4. Shopper's Guide Mini-Ads

Display Ads

GO OLI-160. Inquiries to this section will be followed by a brief description of the *Online Today* ad. To request additional printed information, simply enter your name and address at the prompts. OLI will add your User ID number and electronically forward your request to the appropriate advertiser(s). The names, addresses and User ID numbers will also be forwarded via US Mail at the end of each month.

CompuServe Page OLI-160
ONLINE TODAY ADVERTISERS/OLI

1. April 1989 Advertisers
2. March 1989 Advertisers
3. Feb. 1989 Advertisers

Editorial Articles/Reviews

At the end of each electronic version product review, you'll be asked if you wish to request further information through the Online Inquiry system. A "yes" response will let the system prompt you for your name, address and other information so that your request can be forwarded to the appropriate company. If you respond "no," the system will return you to the previous menu.

To request information about products reviewed in the print edition, GO OLI-280 and select the appropriate listing, such as April Hardware Reviews. At the next menu, select the product you're interested in. If you answer "yes" at the question prompt, the OLI system will prompt you for the necessary information.

Requests to these sections will be stored and forwarded by traditional mail once each month.

CompuServe Page OLI-280
REVIEW LISTINGS/PRINT EDITION

1. April Hardware Listings
2. April Software Listings
3. April New Product Listings

Shopper's Guide

GO OLI-70 to get information about *Online Today*'s mini-ad program.

To request information from Shopper's Guide advertisers, follow the instructions outlined in each ad.

CompuServe Page OLI-70
SHOPPER'S GUIDE

1. About Shopper's Guide
2. Rates and Information

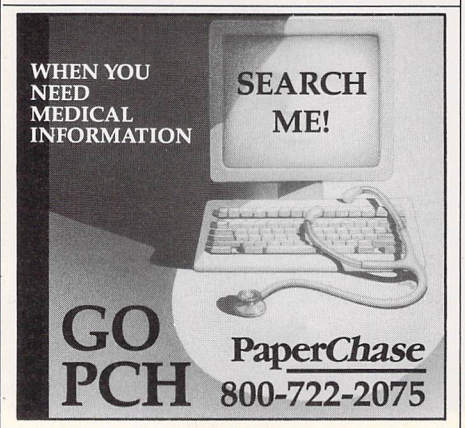
***Note**: Additional requests during the same session will not require you to re-enter your name and address.

Make Money With Your PC

A Revolutionary Software System, designed for maximum profits with minimum setup, now transforms any IBM PC/XT/AT or compatible computer into a secure, reliable Bulletin Board and Information Host System.

Subscription Systems throughout the free world are presently being used in dial-a-date and matchmaking applications, for multi-user databases and multiple listing endeavors, on-line order taking, along with scores of other lucrative telecommunications tasks.

To learn more about this unique, self-perpetuating opportunity that can adapt to both voice and data environments, contact: PC/WORKS at (805) 654-0724 or FAX (805) 650-0195.



CompuServe offers a variety of products that help you get the most out of every online session. The Spring Fingershopping sale is the place to find valuable savings on CompuServe merchandise from March 1, 1989, through April 30, 1989.

Product Guides

Free $10 Usage Credit

with every* CompuServe Users Guide *ordered online.

(It's like getting the guide for free.)

If you're an Information Service user, but don't own a copy of the *CompuServe Users Guide* (5/88 version), then we urge you to take advantage of this limited-time offer. By getting this $24.95 value for $9.95, you get your money back, and more, in connect time alone.

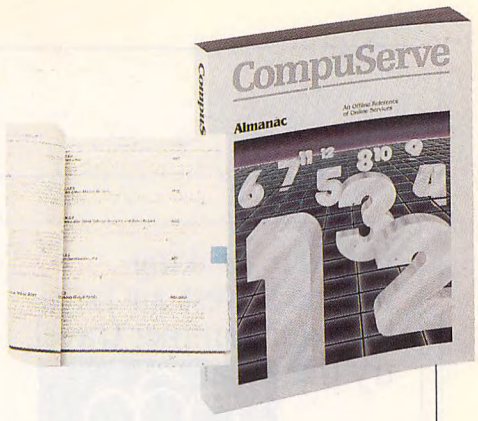
This comprehensive, 200-page guide will help you make the most of online connect time. Speaking of connect time, you receive a $10 usage credit with each guide. This guide is also included in the CompuServe Membership Kit.

The guide covers: EasyPlex® electronic mail; the Executive News Service; the National Bulletin Board; Citizen's Band Simulator; special interest forums; information transfers to and from your computer; travel services; financial services; electronic shopping; interactive games; and more.

For further assistance, a System Configuration Diagram and Quick Reference booklet also come with each *CompuServe Users Guide*.

Retail price	**$14.95**
FREE usage credit	**10.00**
Total value	**$24.95**
You pay	**$9.95**

Remember, offer is only valid for online orders.



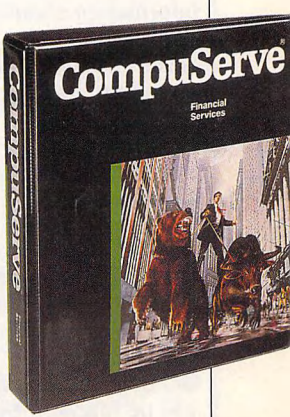
CompuServe Almanac (Fourth Edition)

With so many online areas on the CompuServe Information Service, you probably have not visited all of them. *CompuServe Almanac* (Fourth Edition) lets you get acquainted with unfamiliar areas without visiting them individually online. More than 300 pages are loaded with helpful features, presenting products in "workbook" style to help you research and recall key destinations. The *Almanac* is certain to pay for itself in connect-time savings.

Reg. $12.95 Save $5.00 $7.95

(Free with qualifying order of $50 or more)

CompuServe Financial Services Users Guide



This informative guide is an exhaustive analysis of the financial services on CompuServe. It explains, in-depth, how to use each service effectively. Ideal for new or veteran investors. A classic case of minimal investment, high return.

Reg. $13.95
Save $4.00 $9.95

IQuest Database Directory

Use IQuest more efficiently and effectively with this guide published by CompuServe. The guide provides a description of each database and is broken down by subject for easy reference. IQuest users will find this a valuable tool to expedite research and conserve connect time.

$3.95

More CompuServe online products have instructional guides to help you make the most of your connect time in designated areas. Type GO ORDER to access the Online Order Area and view a more complete list of guides, manuals and CompuServe merchandise.

CompuServe Connections

Custom CompuServe software is unparalleled when it comes to getting the most out of every minute you spend online.

The CompuServe Information Service Membership Kit

Put a family member, friend or business acquaintance online with The CompuServe Information Service Membership Kit. The kit includes a copy of the *Users Guide*, a Quick Reference manual, a System Configuration Diagram, plus:

- a $25 introductory usage credit
- a personal User ID number and private password
- a list of Information Service rates and local telephone access numbers
- a subscription to *Online Today* magazine

$39.95

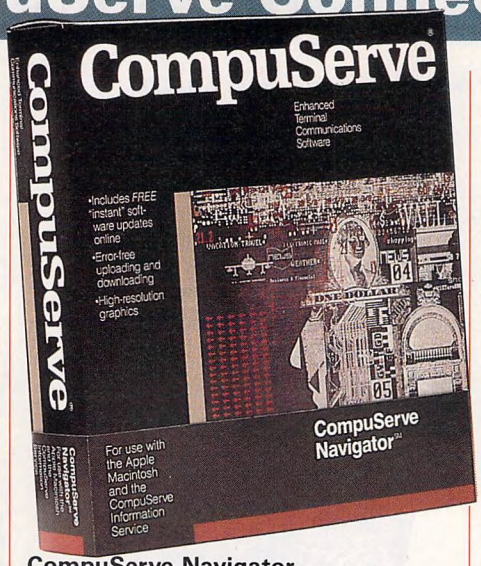
VIDTEX Terminal Communications Software

Link up to the CompuServe Information Service with custom CompuServe VIDTEX communications software. Whether you have an Apple®, Atari® or Commodore®, you'll get the ideal connection with VIDTEX. (Complete information about VIDTEX compatibility requirements is available online: GO VIDTEX.) Only CompuServe offers this complete communications software package that includes:

- "instant," free software updates online
- error-free uploading and downloading on CompuServe
- low- and medium-resolution graphics
- automatic logon and menu navigation files
- programmable function keys
- capture buffer
- adjustable communication settings
- cursor positioning
- support of Hayes-compatible modems

VIDTEX works with the Atari 800, 800 XL, 600 XL with 64 K, 1200 XL, 65 XE, 130 XE, the Apple II Family, Commodore 64, TRS-80 Model III and Color Computer.

$39.95



CompuServe Navigator Communications Software (version 3.0)

The all-new CompuServe Navigator communications software for the Macintosh lets you automate online access to the CompuServe Information Service via Host Micro Interface. Simply specify your online tasks and destinations and CompuServe Navigator does the rest. It works more efficiently on the Information Service than any other communications software for the Mac, thus conserving online time. CompuServe Navigator includes the following and more:

- latest version of CompuServe's enhanced B protocol; 30 percent faster than industry standard XMODEM
- support of GIF graphics
- offline composition capabilities

Suggested retail $99.95

Introductory price $79.95

Version 3.0 is due for release in March!

Note: If you own an earlier version of CompuServe Navigator and wish to upgrade, type GO VIDTEX online for complete instructions.

Professional Connection™-Version 3

This powerful software package for the IBM PC, PC-XT, PC-AT and most compatibles has the features of VIDTEX, plus more. Professional Connection-Version 3 provides colorful financial charts, pictures and weather maps with CompuServe's GIF protocol, NAPLPS and RLE graphics. With a few keystrokes, you can connect with your online destination. Professional Connection-Version 3 includes the following and more:

- latest version of CompuServe's B protocol for faster, error-free downloads
- 110-9600 baud support
- Remote Job Script Command Language
- terminal settings directory
- custom menus
- menu or command driven
- full screen text editor
- VT100 terminal emulation

Note: We are currently distributing Version 3.1d. If you already own Version 3 and wish to upgrade to 3.1d, type GO VIDTEX online for complete instructions.

$49.95

Books and Periodicals

Several books have been written for CompuServe by independent authors to help Information Service members use the service as efficiently and effectively as possible. CompuServe's monthly publication, *Online Today*, is another valuable resource for staying abreast of events in the online computing world.

Back Issues of *Online Today* Magazine

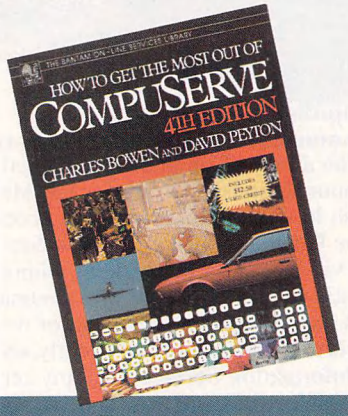
Online Today magazine's back issues represent an archive of incisive articles tracking the evolution and impact of computer information and communication. Use a list of back issues online, to obtain editions missing from your set. (Quantities for some issues are limited.)

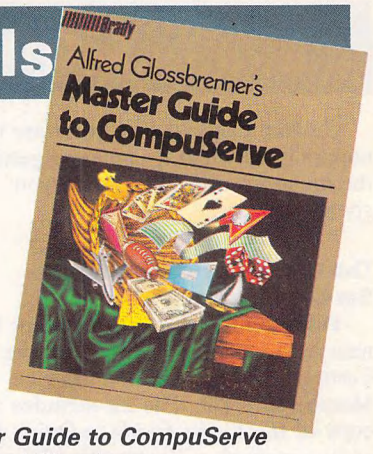
Reg. $2.50 **Save** $1.00 **$1.50**

How To Get the Most Out Of CompuServe *(Fourth Edition)*
by Charles Bowen and David Peyton

This newly-revised, Fourth Edition is a valuable resource for accomplished CompuServe users, novices and even non-members. The previous three editions received high acclaim for their step-by-step discussions of CompuServe's leading products. And this new edition promises to be even better. Plus, each book includes a $12.50 usage credit!

Reg. $19.95 **Save** $3.00 **$16.95**





Master Guide to CompuServe
by Alfred Glossbrenner

From the author of several online computing books comes the *Master Guide to CompuServe*, written for novice and advanced CompuServe members alike. According to the author, it not only explains how to use the service, but gives you the necessary tools to keep up with the constant expansion of the CompuServe Information Service. It is an invaluable resource for CompuServe members at all levels.

Reg. $19.95 **Save** $3.00 **$16.95**

Attractive Apparel

CompuServe's array of recreational attire lets you show support for your favorite online game or CompuServe as a whole.

BLACKDRAGON T-Shirt

Clad yourself in stylish battle gear with this black and white BlackDragon T-shirt. A must for any true dragon-slayer. Adult sizes S, M, L, XL.

$7.95

Island of Kesmai T-Shirt

Look your best for your next visit to the island. This Island of Kesmai T-shirt is the ideal attire for encounters with island inhabitants. Available only in grey. Adult sizes S, M, L, XL.

$7.95

CompuServe Logo T-shirt

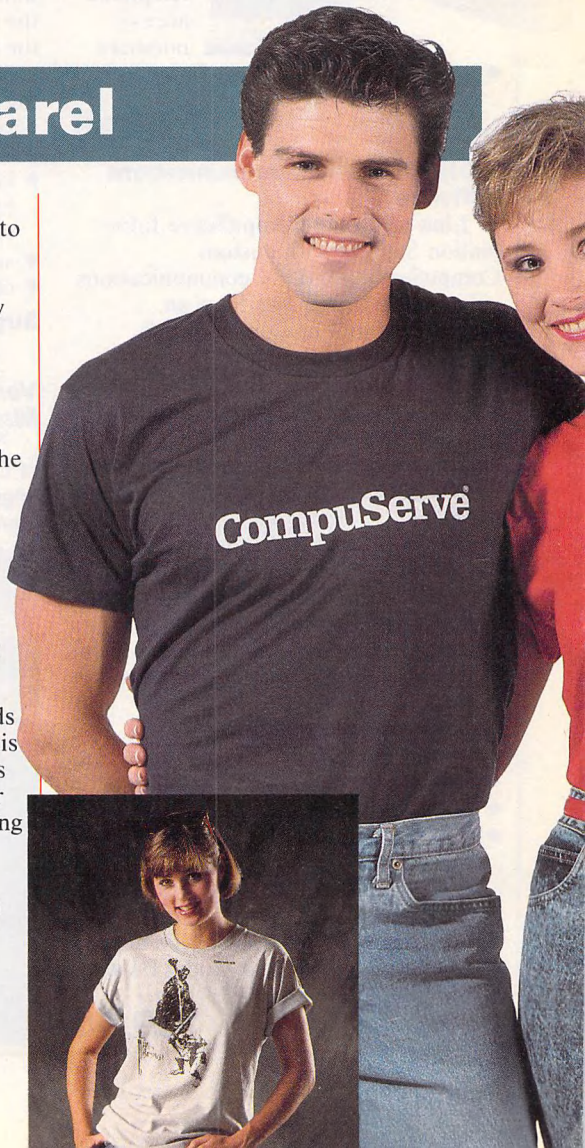
Announce your role as one of the leaders. Display online allegiance to the nation's leading information service with this cotton/poly T-shirt silk-screened with the CompuServe logo. Available in light blue, navy blue and red. Adult sizes S, M, L, XL. Child sizes S, M, L.

$7.95

British Legends T-Shirt

As you traverse the unfamiliar lands of British Legends, clad yourself in this attractive British Legends T-shirt. It's a great way to outwardly display your enthusiasm for this exciting role-playing game. Available only in red. Adult sizes S, M, L, XL.

$7.95



CompuServe Corner

An eclectic mix of CompuServe merchandise is offered during this Fingershopping sale. But it's not all that can be found in the special Online Order Area. Type GO ORDER online to get the complete list of CompuServe products.

CompuServe Digital Desk Clock

This contemporary timepiece, mounted within a clear lucite desk stand for high visibility, is a pleasant addition to any computer workstation — home or office. It prominently displays the CompuServe logo and comes with a perpetual calendar in an adjacent window.

Reg. $10.95 Save $5.45 $5.50

CompuServe Information Service System Configuration Wall Chart

This 35″ x 33″ poster (5/88 version) depicts all screens appearing on the Top Menu and all screens accessible from those initial choices. Extremely helpful for Information Service navigation.

$3.95

(Free with any purchase of $25 or more)

Higher Intelligence Poster

This detailed rendering of the "higher intelligence" image, produced exclusively for CompuServe, is a colorful and mind-boggling piece of art that will enhance any office or den. Poster is 18 ½″ x 24″.

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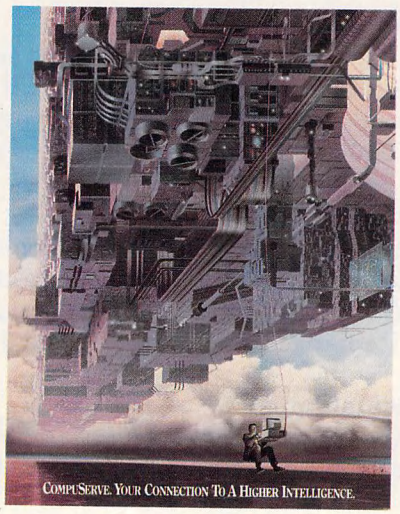

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UPDATE

Save 50 Percent on PTS Newsletter Database in IQuest

The IQuest search and display charges for the PTS Newsletter Database are reduced from $18 to $9 during April. PTS Newsletter Database provides complete text from more than 170 specialized business and industry newsletters covering US and international industries, markets, technologies and companies. Retrieve 15 headings and one complete article for $9. Subsequent articles are $9 each. Connect-time and telecommunication charges remain in effect. GO IQUEST

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Travel Forum Hosts Trade Show

Representatives from online travel services, including OAG, Eaasy Sabre, Travelshopper, Westcoast Travel, Discover Orlando and ABC Worldwide Hotel Guide, will answer questions about their products on April 6, 13, 20 and 27 at 9 p.m. EDT. Conference transcripts will be available in Library 0. GO TRAVSIG

Get to Know The Mall on Free-connect Weekends

Enjoy free connect time in several Mall stores, including Buick Magazine and Ford Motor Company during the Online Auto and Air Show, April 8 and 9; in Brooks Brothers, Apparel Concepts and Elite Eyewear during the Spring Fashion Show, April 15 and 16; in Ballantine Books, Penguin Books and American Magazine on April 22 and 23; and in Air France, Rin Robyn Pool 'N Patio and Hammacher Schlemmer on April 29 and 30. A complete schedule of participants is available online. GO MALL

CompuServe Forums Support Special Interests

The IBM/Special Needs Forum addresses education of the handicapped, literacy programs and bilingual and vocational education for users of IBM PCs and compatibles. GO IBMSPEC

The Ask3Com Forum offers sections on EtherLink adapters, 3+Open operating systems, the Bridge line of wide-area connectivity products and other 3Com products. Issues concerning IBM PC and Macintosh networks, as well as bridges, gateways, routers and wide-area network connections, are discussed. GO ASKFORUM

TrainNet addresses the needs of model train hobbyists, including layout and construction, photography, paint and more. GO TRAINNET

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